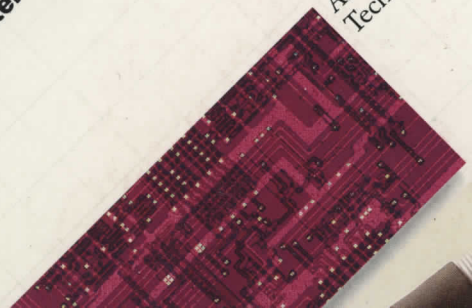
Intel's Winning Strategies

Architectural and Technological Leader

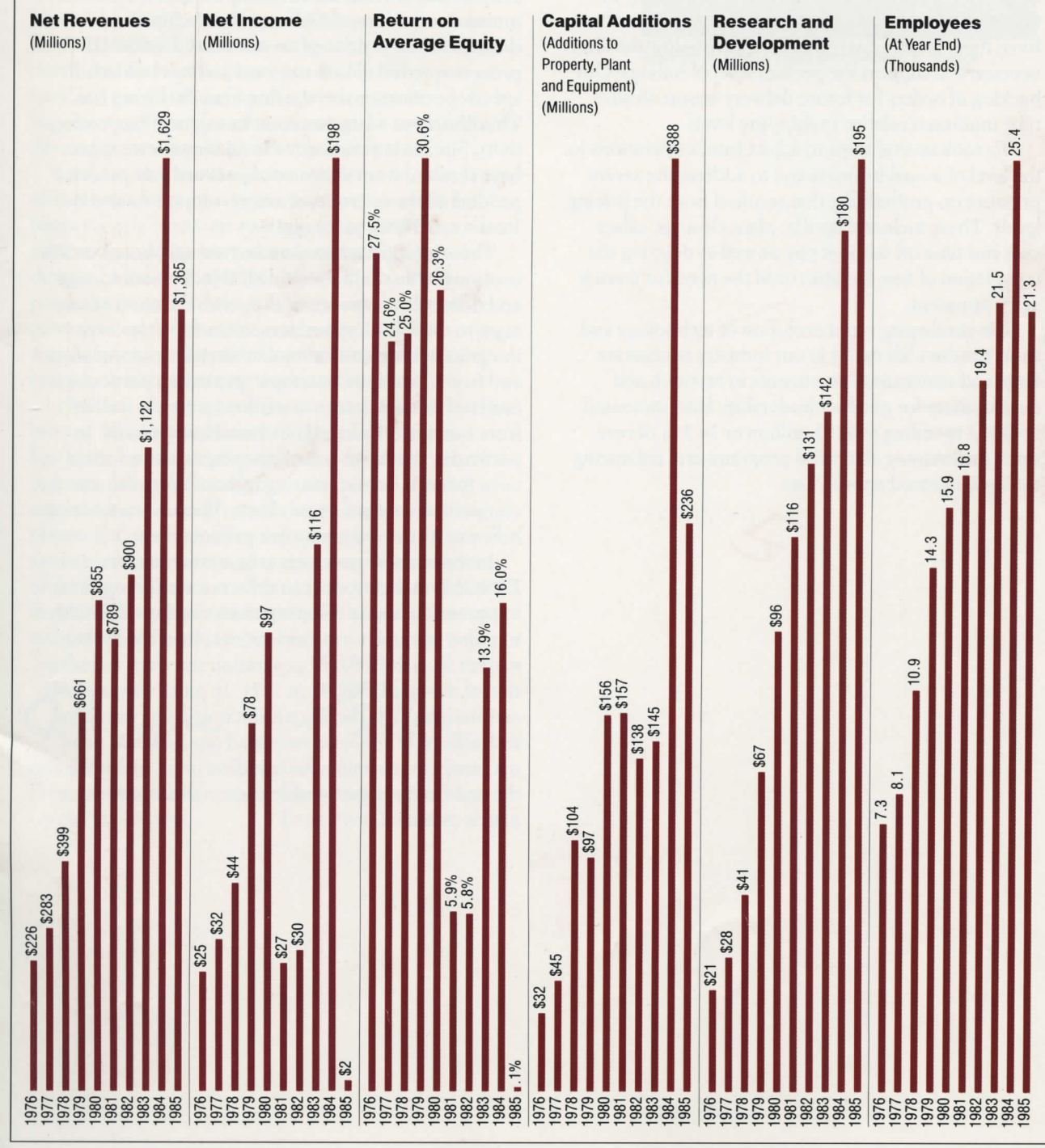


Preferred Supplier

World-Class Manufacturer

(Dollars in thousands—except per share amounts)		1985	1984
Net Revenues		$1,364,982	$1,629,332
Income (Loss):	Before taxes	$ (5,448)	$ 298,149
	Net	$ 1,570	$ 198,189
	Per share	$ .01	$ 1.70
Return on revenues:	Before taxes	(.4%)	18.3%
	Net	.1%	12.2%
Return on average equity		.1%	16.0%

See page 27 for a description of our industry segment reporting.



Management Report

It was a miserable year for Intel and the rest of the semiconductor industry. The business slowdown we entered toward the end of 1984 worsened in 1985. The slump extended generally across the computer-related industry, reflecting much lower market growth than expected. Intel's customers, who had ordered heavily during the 1983-1984 period of great demand for semiconductor products, found themselves with too much inventory. An over-capacity situation existed throughout the semiconductor industry as the inventory glut was being worked off during 1985. Prices fell precipitously.

As a result, Intel's revenues were off 16% from the previous year's record $1.6 billion, and net income for 1985 essentially disappeared. The company experienced operating losses in the second, third and fourth quarters of the year and earnings per share for the year were $.01.

For Intel, net new orders reached their lowest level in the second quarter of 1985, improved slightly in the third quarter and somewhat more in the fourth. Even then, fourth-quarter orders were below the level necessary to support the present level of billings. Our backlog of orders for future delivery is near an all-time minimum relative to shipping levels.

We took several steps to adjust Intel's operations to the level of actual business and to address the severe pressure on profitability that resulted from the pricing levels. These included layoffs, plant closings, salary cuts and time off without pay, as well as delaying the completion of new facilities until the need for them is again apparent.

The continuing rapid evolution of technology and short product life cycles in our industry necessitate large and continuing investments in research and development for product leadership. Intel increased its R&D spending to $195 million or 14.3% of revenues, maintaining all critical programs and enhancing those we deemed appropriate.

The aggressive pricing for component and system products that exists in the marketplace has served to focus our efforts toward increasing productivity, not only in the factory but in engineering and administrative chores as well. Our factories have never performed better. Yields (the number of good chips we get from a silicon wafer) are at all-time highs and the output per unit of labor climbed all year. Problems associated with the 1984 start-up of the world's first six-inch-diameter wafer processing facility in Albuquerque, New Mexico, are behind us and we are now processing six-inch wafers in two other silicon plants as well. Much of the $236 million spent on capital equipment during the year was for automation and to meet the requirements of new technology.

Of equal importance is automation that increases engineering productivity. Intel's computer-aided engineering capability has more than kept pace with increasing product complexity. Even our new 32-bit microprocessor, the 80386–composed of some 275,000 interconnected transistors on a 1-cm^2 chip and designed to be produced on our new CHMOS III process–proved to be functional and worked to full-speed specifications on the first manufacturing run. This illustrates a large increase in engineering productivity. Similar improvements in administrative areas have resulted from wide use of personal computers, a product of the microprocessor revolution started by Intel some fifteen years ago.

These past gains alone are not enough, however. We continue to be challenged on all sides by both foreign and domestic competitors, each with different advantages to exploit. Competition comes from the large integrated Asian and European electronics companies and from numerous "startups" exploiting particular facets of the technology as market niches, as well as from our more classical U.S.-based competitors. In particular, the Asian-based competitors have forced us to focus on manufacturing technology to remain competitive in memory products. The lessons we learn here can be carried across our product lines.

In the memory products area, we focused on EPROMs as the product to drive our technology. It is important to have a volume product such as EPROMs to refine manufacturing techniques. Intel has led the market in each EPROM generation since our introduction of the first EPROM in 1971. In particular, we have emphasized high-density products utilizing advanced technology. In 1985, we extended our EPROM product family in several important directions, including the one-time-programmable version in a windowless plastic package.

This year we announced our decision to drop out of the dynamic random access memory business. This very competitive area has been targeted by non-U.S. manufacturers so it is difficult to produce a return on the investment required to be a participant.

Intel's Systems Group experienced a relatively good year. Sales of our System 310 microcomputer family grew significantly, in part as a result of its being chosen as the standard multi-user microcomputer system for the U.S. Army Materiel Command. Our board products and System 310 were extended to include high-performance, multiprocessing capabilities based on 80286 microprocessors. Our speech-recognition products were an important part of a multi-company display at the Autofact Convention, where several companies, led by General Motors, demonstrated how a variety of products from different suppliers could work together in a network under MAP (Manufacturing Automation Protocol) in an automated manufacturing line.

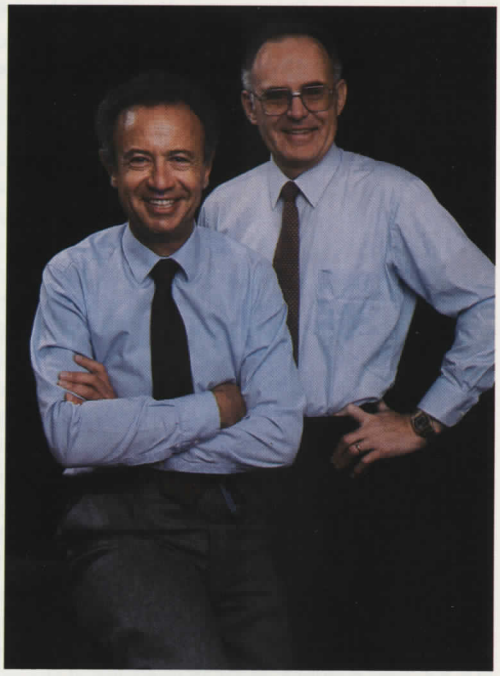
The high point of 1985 for Intel was the introduction of the 80386, an advanced 32-bit microprocessor that is completely software-compatible with previous members of our microprocessor family. When we unveiled the 80386 in October we demonstrated working chips and boards and announced the availability of development support systems and software.

In short, this was the most complete and most favorably received microprocessor announcement in Intel's history. Early customer reaction to the 80386 has been outstanding. Many have already committed system designs based on the 80386. Not only should this product continue Intel's strong position in the office computer market, but the product's capabilities should be especially useful in other application areas such as engineering workstations.

1985 was clearly one of the toughest years in Intel's history. What we've been through is more than just a low in the business cycles typical of the semiconductor industry. What will result from this period is a new semiconductor industry with fewer large mainstream players and many smaller niche competitors. 1986 will probably be another tough year, as we climb back out of the slump. We are confident, however, that we have the products, people and strategies that will allow us to compete more strongly than ever.

A.S. Grove
President and Chief
Operating Officer

G.E. Moore
Chairman and Chief
Executive Officer



Andrew S. Grove (left) and Gordon E. Moore

Intel in Brief

Intel is a manufacturer of electronic "building blocks" used by Original Equipment Manufacturers (OEMs) to construct their systems. Intel's strategy is to offer OEMs a wide range of solutions based on industry standards, and to offer these solutions at the component, board and system levels. Following are brief profiles of the principal products Intel provides, and a review of some of the major developments in each area during 1985.

Microprocessors

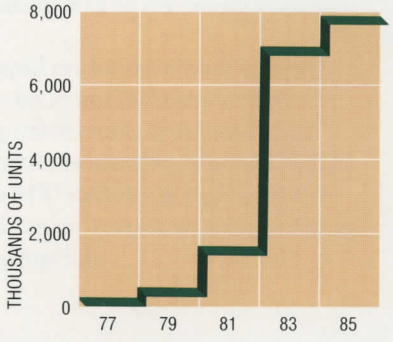
Function. A microprocessor is the central processing unit of a microcomputer-based system. The microprocessor manipulates data in the system, controlling input, output, peripheral and memory devices.

Intel Position. Intel introduced the industry's first microprocessor in 1971, and is the world's largest manufacturer of microprocessors.

1985 Developments. Intel's most significant product introduction of the year was the 80386 32-bit microprocessor, the highest-performance general-purpose microprocessor ever developed. Other new microprocessor products this year included the 80C86 and 80C88, low-power CHMOS versions of the widely used 8086 and 8088 microprocessors. Intel also introduced high-speed (12.5 MHz) versions of both its 80186 and 80286 16-bit microprocessors. Despite the overall slowdown in business, record numbers of customers committed to use the 80186 and 80286 in future products.

Market data. 1985 industry sales, 8-, 16-, and 32-bit microprocessors: $434 million. 1981-1985 compound annual growth rate: 32.4%.[1]

Worldwide Unit Shipments of 16-bit Microprocessors



Source: Dataquest

Microprocessor Peripherals

Function. Peripheral components include special purpose microprocessors that manage either input/output or system functions. Peripheral controllers perform specific tasks such as control of floppy disks, Winchester disks, keyboards, or printers. Graphic controllers display graphic and text information. By handling specific tasks very efficiently, peripherals reduce the burden on the central processing unit and enhance total system performance.

Intel Position. Intel offers more than 60 VLSI peripheral components, the broadest selection of such products in the industry. These products provide microsystem designers with a set of building blocks designed to operate together.

1985 Developments. Intel added to its graphics controller and coprocessor family in 1985 with the introduction of the 82716 Video Storage and Display Device (VSDD). In addition, the company continues to play an active role in the evolution of local area networks. The 82586 LAN coprocessor and the 82588 LAN controller, now in volume production, are among industry standards for high performance networks.

Market Data. 1985 industry sales, microprocessor peripherals: $946 million. 1981-85 compound annual growth rate: 30.5%.[1]

Microcontrollers

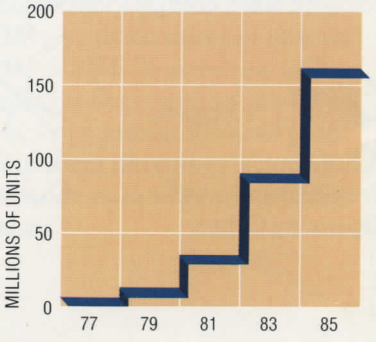
Function. On one chip, a microcontroller has a central processing unit, random access memory, program memory, and input/output circuitry. This product is used in embedded control applications in computer and communications systems; in industrial control for robotics and instrumentation; in communications for phones, modems and terminal equipment; in computer peripherals such as keyboards and printers; in consumer products such as home video; in automotive products for engine control, braking and emission control systems, and in many other applications.

Intel Position. Intel introduced the first 8-bit microcontrollers, the 8748 and 8048 in 1976. They were members of the MCS®-48 family, which soon became the most widely applied 8-bit microcontroller architecture in the world. In 1980, Intel introduced a more powerful 8-bit microcontroller family, the MCS-51. By 1984, this family became a standard high-end microcontroller architecture in the 8-bit arena. In 1982, Intel introduced its third generation microcontroller family, the MCS-96 family of 16-bit microcontrollers. The heart of this family, the 8096, remains the only entrant in the 16-bit microcontroller market to date.

1985 Developments. The 16-bit microcontroller market showed a surge of growth toward year-end, and Intel's MCS-96 family is being applied in a variety of environments such as automotive, computer and industrial applications where intensive, high-precision, real-time control is required. In particular, this chip recently has gained popularity in the communications market in modem applications and in applications needing digital signal processing functions.

Market Data. 1985 industry sales, microcontrollers: $1.1 billion. 1981-85 compound annual growth rate: 28.7%.[1]

Worldwide Unit Shipments of 8-bit Microcontrollers



Source: Dataquest

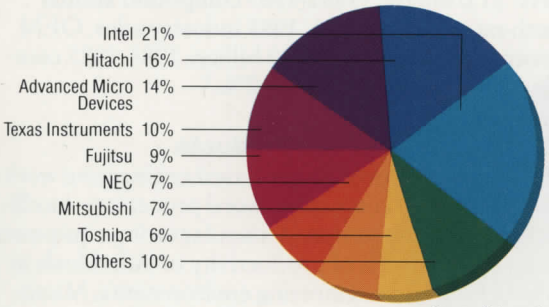
[1] *Dataquest estimates*

Memories

Function. Memory components are used to store computer programs and data entered during system operation. Intel offers a variety of memory types, selected by users according to the price/density/functionality requirements of their specific applications.

Intel Position. Intel is the world's largest manufacturer of EPROMs and of high-density magnetic bubble memories. The company also manufactures fast static RAMs, E^{2}PROMs, non-volatile RAMs, and a line of erasable, programmable logic devices (EPLDs) based on its CHMOS (Complementary High-Performance MOS) EPROM technology.

1985 Worldwide EPROM Market Shares ($$)



Source: Dataquest

1985 Developments. Despite predatory pricing by Japanese competitors, Intel's share of the worldwide EPROM market increased from 17% in 1984 to 21% in 1985, according to Dataquest. During 1985, Intel introduced the KEPROM™ Keyed-Access EPROM, a proprietary device that blocks unauthorized access to computer systems and prevents illegal copying of proprietary software stored in the KEPROM. Intel entered the programmable logic market with its user-programmable CHMOS EPLDs. These are standard components sold in an unprogrammed state that are customized by users. Intel also produced several high-performance CHMOS EPROMs and a family of fast CHMOS static RAMs. In addition, the company announced its plans for one-megabit EPROMs in three industry-standard pinouts. Also, Intel was the first company to offer a complete line of high-density OTP™ (One-Time Programmable) EPROMs in windowless plastic packages. With the company's new Quick-Pulse Programming™ algorithm, these devices can be programmed in a fraction of the time required by earlier programming algorithms. Advances in packaging were taken one step further with the introduction of a family of surface-mount EPROM packages, also compatible with the fast algorithm. Intel's bubble memory product line was expanded to include two new board products: the iSBC® 264 provides up to two megabytes of non-volatile storage and the PC-Bubble™ card offers a system designer the opportunity to evaluate and program a bubble memory system on a desktop personal computer.

Market Data. 1985 industry sales, MOS semiconductor memories: $3.9 billion. 1981-85 compound annual growth rate: 17.8%.[1]

Development Systems

Function. Engineers use microcomputer development systems to develop and debug the hardware and software for systems based on Intel architectures.

Intel Position. Intel is the world's largest manufacturer of microcomputer development systems and in-circuit emulators, and provides a complete line of integrated development tools focused on increasing the productivity of design engineers. Intel has about one-third of the market for these products, the highest of any manufacturer in this concentrated industry, according to Prime Data.

1985 Developments. Intel brought about a major change in the development environment in 1985 by opening it up to industry-standard hosts; it is now possible for design engineers to use Intel's extensive line of development hardware and software tools with DOS, VMS[2], XENIX[3], and iRMX™ operating systems, in addition to Intel's proprietary iNDX development operating system. This means OEMs can select and combine a set of development system tools that will run in various environments including Intel's Intellec Series IV or 286/310, VAX[2], or IBM PC-DOS-based equipment.

Market Data. 1985 industry sales, microcomputer development systems and development tools: $610 million. 1981-1985 compound annual growth rate: 14.8%.[4]

Software

Function. Software is the set of instructions that must be written to direct a microcomputer-based system to perform specific tasks.

Intel Position. Intel offers an extensive selection of operating systems, high level languages, networking software, and development and debug support for OEMs incorporating Intel microprocessors or microprocessor-based systems into their end user products.

1985 Developments. Intel announced iRMX 286 Release 1.0, a real time operating system with 16 megabyte memory addressability and improved debugging. iRMX, developed by Intel, is optimized for real-time applications such as computer-directed machines in factories. iRMX 286 Release 1.0 is the latest advance in the iRMX real time operating system family. XENIX Release 3.0, a value added version of UNIX[5] System III, began volume shipments in early 1985, and has met with excellent customer acceptance. Intel systems using the XENIX operating system showed dramatic sales growth in the past year. 1985 also saw the introduction of APEX software for Intel XENIX-based systems. This software allows the use of multiple 80286 application processors in Intel XENIX systems, and brings Intel system performance well into the minicomputer range. Intel introduced UNIX System V for the 80286 in early 1985, giving multitasking capabilities to 80286-based systems.

Market Data. 1985 industry sales, microcomputer software: $1.2 billion. 1981-85 compound annual growth rate: 42.6%.[6]

[1] *Dataquest estimates*
[2] *VMS and VAX are trademarks of Digital Equipment Corp.*
[3] *XENIX is a trademark of Microsoft Corp.*
[4] *Prime Data estimates*
[5] *UNIX is a trademark of Bell Labs*
[6] *infoCorp estimates*

Microcomputer Systems

Function. Intel microcomputer systems and single board computers based on Intel components are now widely accepted as basic building blocks for technical and commercial applications. Intel's customers have increasingly focused their efforts on their own unique value-added by taking advantage of these higher levels of integration.

Intel Position. Intel's customer base for OEM systems and boards continues to diversify. Thousands of end users are now using Intel's System 310 in military, medical, library, banking, factory and other application environments.

1985 Developments. Intel introduced thirteen MULTIBUS® II products in early 1985. Since then, the MULTIBUS II products have gained popularity because they use the highest-performance 32-bit bus on the market. MULTIBUS II provides an upgrade path from Intel's widely-used MULTIBUS I, an IEEE standard. In 1985, Intel also introduced 80386-based single-board computers for both the MULTIBUS I and MULTIBUS II architectures.

Intel's BITBUS™ microcontroller interconnect moved ahead on several fronts including standards activity, new hardware and software products, and an increasing number of users in high-growth markets such as industrial automation, instrumentation, medical electronics and process control.

Intel announced performance improvements on several microcomputer systems products in 1985, including the iSBC® 286/12 Central Processor Board, the iSBC 214 Peripheral Controller Board, and the System 310AP (Advanced Processor) and System 310 APEX supermicrocomputers. The System 310 AP is based on the 8-MHz 80286 microprocessor. The System 310 APEX is a multiprocessor system that combines up to four 80286s, yielding dramatic performance increases at much lower cost.

Intel speech-recognition workstation

Speech-recognition systems came of age in 1985 with Intel's introduction of a line of speech-recognition microcomputer systems and products based on the System 310. These industrialized speech workstations, designed to withstand the harsh environments of industrial automation applications, are currently being used at the facilities of several leading manufacturers, including automotive assembly plants. Previous methods of recording data in such environments required operators to key in data manually. Intel's speech-recognition products free operators' hands and eyes and provide operator mobility by allowing the recording of data in computers via wireless voice transmission.

Recognizing the potential for tremendous growth in the PC add-on market, Intel introduced its Above™ Board product line in 1985. Sold through computer retail outlets, these memory board products occupy existing card slots inside IBM PCs, XTs or ATs, and compatibles and increase overall memory size for individual machines by more than ten times. The Above Board series is based on the Lotus[7]/Intel/Microsoft[3] Expanded Memory Specification, a cooperatively developed interface that is rapidly becoming an industry standard. In 1985 Intel also introduced its family of iPSC™ concurrent computers which are used primarily in the scientific community to solve extremely complex problems in areas such as seismic processing, circuit analysis, or aircraft design. In an iPSC, a central controller divides a complex problem among as many as 128 of Intel's 80286 microcomputers, each of which works to solve a portion of the problem concurrently.

Market Data. 1985 industry sales, single board computers: $1.0 billion[8] (1981-1985 compound annual growth rate not available). 1985 industry sales, OEM microcomputer systems: $3.9 billion. 1981-1985 compound annual growth rate: 37.2%.[6]

Microcommunications Products

Function. Microcomputer-based engineering workstations, personal computers, word processors, intelligent printers and automated manufacturing equipment have given new levels of productivity to individuals in office, factory and engineering environments. Microcommunications include microchip-based telecommunications and data communications solutions that allow the interconnection of these individual workstations and environments. This integration results in a more effective use of resources and better coordination of the work process, bringing about another leap in the productivity of an entire organization.

Intel Position. Intel is in the forefront of the emerging microcommunications market supplying leading-technology, standards-based products at the component, software, board and systems levels in all key areas of data communications and telecommunications. Although little reliable market share data exists yet in this emerging field, Intel believes it is the leading supplier of VLSI telecommunications and LAN products.

1985 Developments. Intel has played a leadership role in establishing industry standards for networking and communications protocols. Such standards are the key to the successful interconnection of telecommunication systems, computer networks and individual workstations. In the factory environment, Intel has supported the Manufacturing Automation Protocol (MAP) standard proposed by General Motors with the OpenNet/MAP product line, which includes the iSXM 554 communications board and MAP-NET software. Intel has participated actively within the Institute of Electrical and Electronic Engineers in working to establish several local area network standards for the office environment, including Ethernet and StarLAN. Intel is the leading supplier of VLSI components that support these standards.

Intel has joined major telecommunications equipment manufacturers to define and implement ISDN (Integrated Services Digital Network) in both the business PBX and public communications systems. ISDN will make a global voice/data communications network possible; Intel's iATC (Advanced Telecommunications Components) products support the ISDN standard.

Market data[9]. 1984 industry sales, data communications and telecommunications equipment: $19.3 billion. (1985 data not available.) 1989 expected industry sales: $36.3 billion.

[3] *Microsoft is a registered trademark of Microsoft Corp.*
[6] *infoCorp estimates*
[7] *Lotus is a registered trademark of Lotus Development Corp.*
[8] *Gnostic Concepts estimates*
[9] *Source:* The Economist, *November 23, 1985*

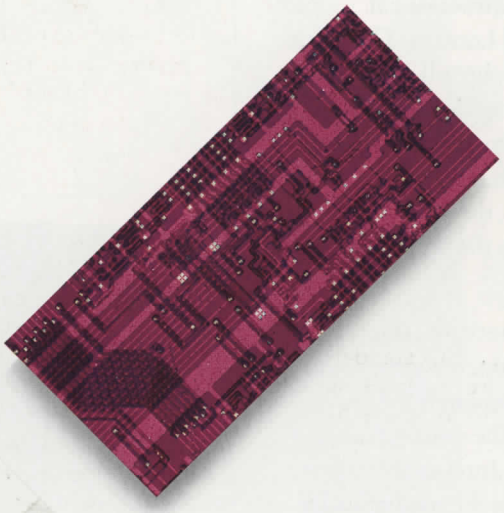
Intel's Winning Strategies

The semiconductor industry is changing. Competition is increasing; the customer base is becoming more diverse. Now the industry not only must produce continuing technological innovations, but also must achieve new levels of quality, service and productivity.

Intel is following a clear, three-part plan to compete and win in this changed environment. The key strategies that make up this plan are the subject of this year's annual report. They are:

- To increase Intel's architectural and technological leadership.
- To be our customers' preferred supplier.
- To be a world-class manufacturer.

The starting point for the strategies is the preeminent technology that has given Intel its premier position in the industry and will shape the Intel of the future.



The Situation: From office to factory automation, and in dozens of other fields, key systems from leading companies are designed around Intel's microelectronic architectures. *The Strategy:*

Increase architectural and technological leadership.

In mid-October Intel introduced the 32-bit 80386 microprocessor at celebrations in San Francisco, Tokyo, Paris, Munich and London. The event received far more press attention than is usually given to the roll-out of a new silicon chip: Articles heralded the 80386 as another example of the dizzying pace of progress in the semiconductor industry, and as a propitious sign of America's ability to compete in the face of stiff foreign challenges.

While those characterizations were certainly correct, the day for Intel was something else as well...the most important of the year in the company's drive to increase its architectural leadership.

"...architectural leadership has always been at the very heart of Intel's strength." "Architecture" refers to the distinctive design and operating characteristics that typify Intel products. For example, because members of Intel's 86 family of microprocessors all run the same software programs, they are all said to have the same *architecture*. Intel architectures are leaders in many important areas of electronics, and architectural leadership has always been at the very heart of Intel's strength. We have achieved this position by being the market leader and innovator–and therefore the standard setter–in microelectronics.

But this leadership is always being challenged on a number of fronts. The 80386 is central to Intel's plans to weather those challenges, and accordingly, the company has major plans for it. And since the chip contains 275,000 transistors, directly addresses more than four billion bytes of memory, runs $6 billion worth of off-the-shelf software and can out-perform many minicomputers, the company believes its expectations for the 80386 are appropriate.

"...the engineering workstation market, long the mainstay of a competitor's microprocessor, is showing considerable interest in the 80386..." First, the 80386 must keep Intel ahead in the market segments in which it now leads. For example, in office automation, where Intel's 8086/80286 architecture is a recognized leader, the 80386 will make possible a new generation of computers that combine compatibility with increased performance.

Second, Intel plans to use the 80386 to take a leading share in markets that traditionally have favored competitors. For example, the engineering workstation market, long the mainstay of a competitor's microprocessor, is showing considerable interest in the 80386 because it offers both "flat" and "segmented" memory schemes.

Finally, the 80386 is expected to be Intel's entree into completely new data processing applications in future years. In artificial intelligence, for example, the 80386 has the performance and addressing capabilities to make possible computerized "expert systems" that will be able to solve the kinds of problems that have customarily required the services of a human expert.

Retaining traditional markets while expanding and winning new ones–that is the charter of the 80386. Of course, the company actively continues to support its other microprocessors. Chief among these are the 80186 and the 80286, which have become important sources of revenue for the company and are now paying off on the enormous sums spent developing them. During 1985, record numbers of customers selected these two products for future

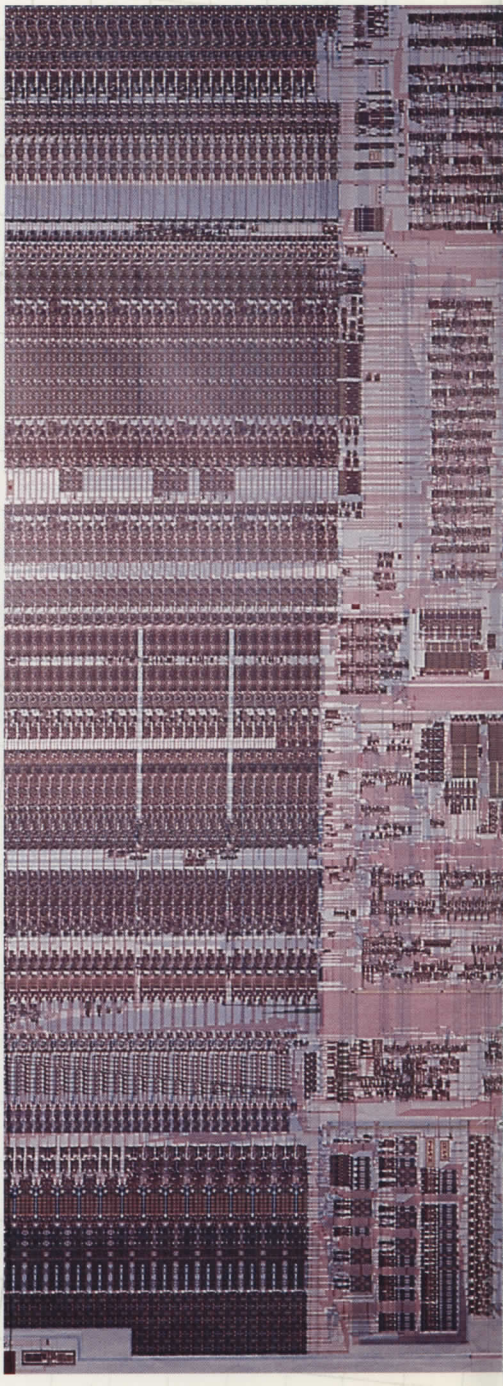
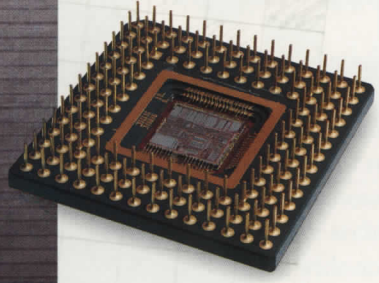


Photo courtesy of McDonnell Douglas

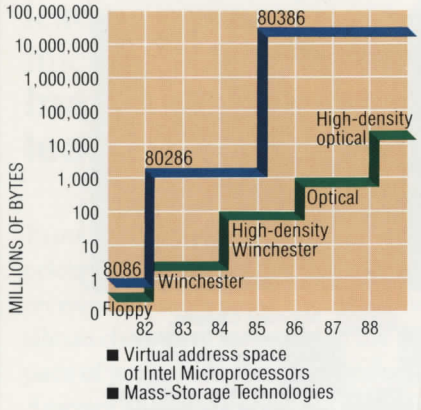
Michael Chapin, McDonnell Douglas hardware systems engineer, tests an engineering prototype of one of his company's flight simulators. It incorporates Intel's MULTIBUS® II, the highest-performance 32-bit bus on the market. MULTIBUS II provides an upgrade path from Intel's widely used MULTIBUS I, an IEEE standard.

Shown here is a 17-foot-square computer-generated plot of Intel's 80386 32-bit microprocessor chip. This chip, the highest-performance general-purpose microprocessor ever developed, incorporates 275,000 transistors, directly addresses more than four billion bytes of memory, runs $6 billion worth of off-the-shelf software and can outperform many minicomputers.

Actual size 80386 microprocessor in pin grid array package.

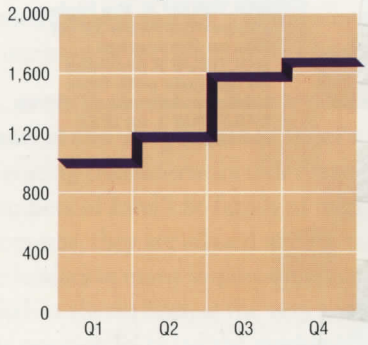


Virtual Address Space of Intel Microprocessors vs. Mass-Storage Technologies

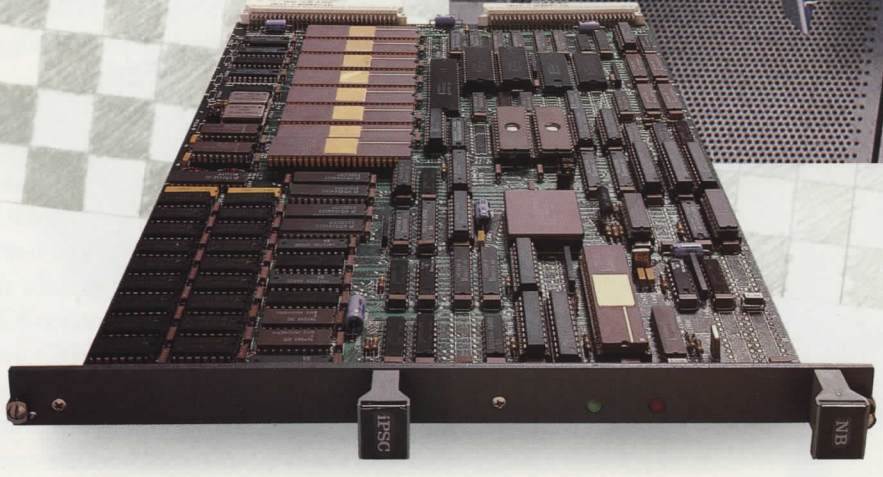


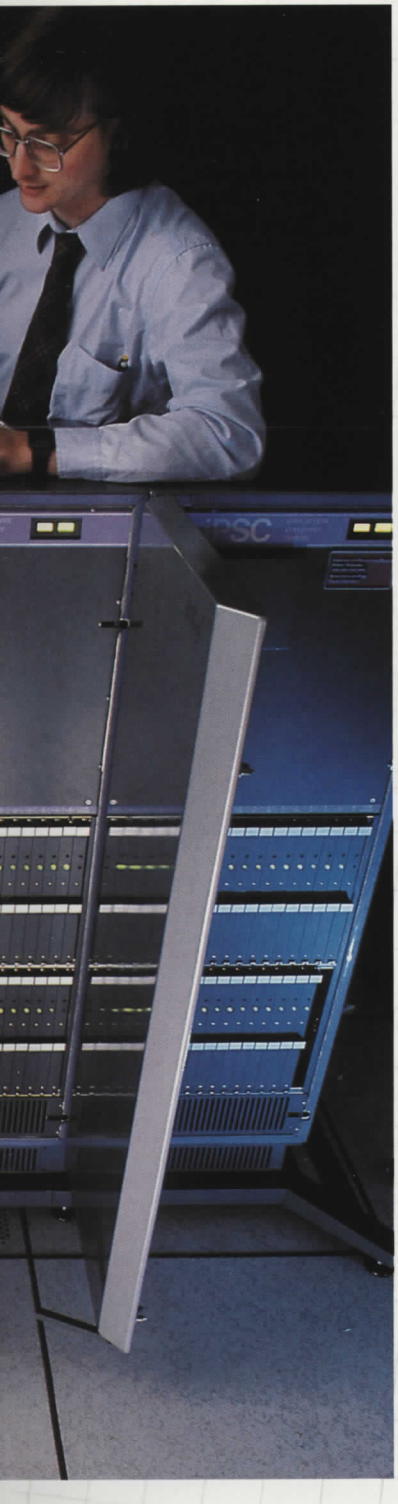
Intel's microprocessors allow full exploitation of the industry's state-of-the-art disk storage technologies. Intel's 80386 32-bit microprocessor can access 64 trillion bytes of virtual address space, far more than any other microprocessor on the market.

1985 "Design Wins"



A good indicator of Intel's bright future is the company's 1985 "design win" record. As this graph shows, in 1985, customers committed to build more than 5000 different systems around Intel products.





Intel's iPSC™ concurrent computers, introduced in 1985, use as many as 128 of Intel's 80286 microcomputers and 1,024 82586 LAN coprocessors to solve complex computational problems such as seismic processing or circuit dynamics. Here Assistant Professor of Computer Science, William Gropp (right), and student Doug Baxter work with the iPSC at Yale University, the site of the first installation of this product. Inset is one of the system's 128 boards.

designs . . . which augurs well not only for sales that will follow, but also for assuring the continued leadership of Intel's microprocessor architectures.

While Intel has an historic association with microprocessors, they are by no means the only area in which Intel is striving to protect and increase its architectural leadership:

■ Virtually any machine that needs a microprocessor also needs memory. Intel introduced the first EPROM (Erasable Programmable Read Only Memory) in 1971 when it delivered the 1702, a 2-kilobit EPROM. Since then, Intel has retained its market leadership by continuing to set standards for new EPROM generations. Late in 1985, the company announced its "pinout" strategy for EPROMs at densities of one-megabit and beyond. These new products are likely to become the industry standards of tomorrow.

■ Intel's MULTIBUS® I bus architecture has become so popular it has been adopted as a formal standard by the Institute of Electrical and Electronic Engineers. (A bus is a set of standards for connecting different elements of a computer system.) In 1985, Intel introduced MULTIBUS II, a bus architecture designed for the more powerful 32-bit systems now being built. It has advanced features available on no other bus and has been very well received by customers.

■ Networks to connect computers are becoming increasingly important because computer users want to share data easily. Local area networks, which typically tie together the systems in a factory, lab or office, are a growing market for Intel. Intel's 82586 LAN coprocessor and the 82588 LAN controller make possible, respectively, very high-performance and very low-cost networks, and are expected to cement Intel's architectural leadership in this field for many years to come. In 1985 Intel also announced plans to support General Motors' Manufacturing Automation Protocol, a local area network for the factory environment.

■ The telecommunications industry is migrating toward a "digitalized" system in which voices are transmitted over telephone lines not as analog signals, but as efficient digital signals that can be transmitted at high speeds. Intel's telecommunications products are making possible much of this transition to a more efficient and economical voice and data communications system. The company has been making telecommunications products for nearly a decade, and has been the first to introduce a number of key products. Because of this experience, many of the telephone switching systems used by businesses and common carriers, as well as other telecommunications equipment, are designed around Intel architectures.

■ Another product that Intel pioneered is the microcontroller–a single-chip computer used to coordinate the functions of machines ranging from factory robots to automobile engines. Last year, Intel's 8096 microcontroller demonstrated that it is well on its way to winning industry-wide acceptance as a "standard architecture" for 16-bit microcontrollers. This distinction was accorded to the two preceding generations of Intel 8-bit microcontrollers, the 8048 and the 8051.

■ "Supercomputers" are very powerful machines that allow scientists to tackle extremely difficult problems such as accurate weather prediction or complex biological modeling. "Parallel computing" is believed by many to be the breakthrough needed to reduce the cost of supercomputing, and to allow the future development of systems that significantly exceed the anticipated performance limits of traditional computer architectures. Intel's iPSC™ concurrent computer family is receiving wide acceptance among researchers in parallel computing. iPSC computers use as many as 128 of Intel's 80286 microcomputers, each working on a portion of a complex computational problem. The iPSC family has already been favorably received in a number of university, government, and corporate research settings where, among other applications, scientists are using the iPSC to research future applications of parallel processing in scientific computing and artificial intelligence.

The Situation: Today's semiconductor customers are expecting ever-improving quality and service from suppliers. And they have several companies from which to choose if they aren't satisfied.
The Strategy: **Be our customers' preferred supplier.**

"Intel Certified" graduates of Intel's distributor training classes are well-equipped to serve the needs of Intel's tens of thousands of smaller customers. In 1985 alone, Intel provided 35,000 hours of technical training to its distributors.

"Demands for quality, on-time delivery and service have become as strong as the demands for new products." For much of the semiconductor industry's history, the major emphasis has been on producing architecturally advanced products based on leading-edge technologies. But about five years ago, customers began to expect more. Demands for quality, on-time delivery and service have become as strong as the demands for new products.

Many of these new demands are the result of changing manufacturing and purchasing philosophies. For example, semiconductor customers are recognizing how costly incoming inspection of products can be. Thus, they are demanding quality so high that incoming inspection can be eliminated entirely.

They also recognize the waste associated with maintaining large inventories of products on the shelf until they are needed on the manufacturing line. Thus, manufacturers want vendors to make frequent, on-time deliveries of precise quantities of parts for almost immediate use in the manufacturing line. The extreme importance of timely delivery in this situation is apparent: If a key part is not supplied at the promised time, a customer's entire schedule can be thrown off and a product can be delayed in getting to market.

In addition, customers now realize how expensive it is to deal with several vendors for the same product. Thus, they are paring down vendor lists, realizing that it is much more efficient to deal with one or two nearly perfect suppliers of a given product than four or five imperfect ones who presumably could make up for each others' shortcomings.

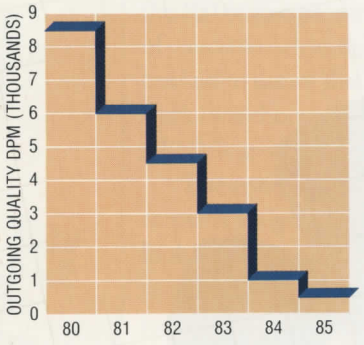
"Intel's defects-per-million level, which was always competitive, has been reduced from 8,500 in 1980 to under 500 in 1985." These stronger demands exist in an environment where several suppliers are available for certain architectures. Therefore, a customer who is unhappy with one supplier's service now has the option to switch suppliers.

Intel is responding to the needs of this changed manufacturing environment. For example, due to substantial improvements in its manufacturing and inspection processes, Intel's defects-per-million level, which was always competitive, has been reduced from 8,500 in 1980 to under 500 in 1985. The company now has one of the lowest defect rates in the industry. As a result, many customers have completely eliminated incoming inspection of Intel products.

Similarly, Intel is placing more emphasis on timely product deliveries. On-time deliveries are particularly important to certain members of Intel's increasingly diverse customer base. For example, if a missing Intel chip caused the shutdown of a customer's automobile assembly line, the results would be dire indeed.

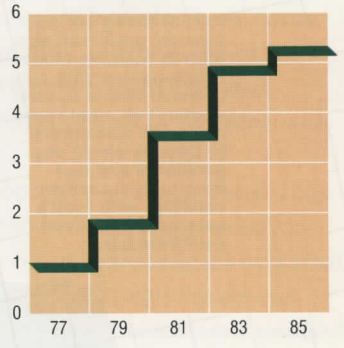
Intel's programs to improve product quality are paying off. As shown in this graph, overall component defect-per-million levels have decreased by close to a factor of twenty since 1980. Intel's DPM level is among the lowest in the worldwide semiconductor industry. This not only builds customers' confidence in our products, but allows them to save costs by eliminating incoming inspection.

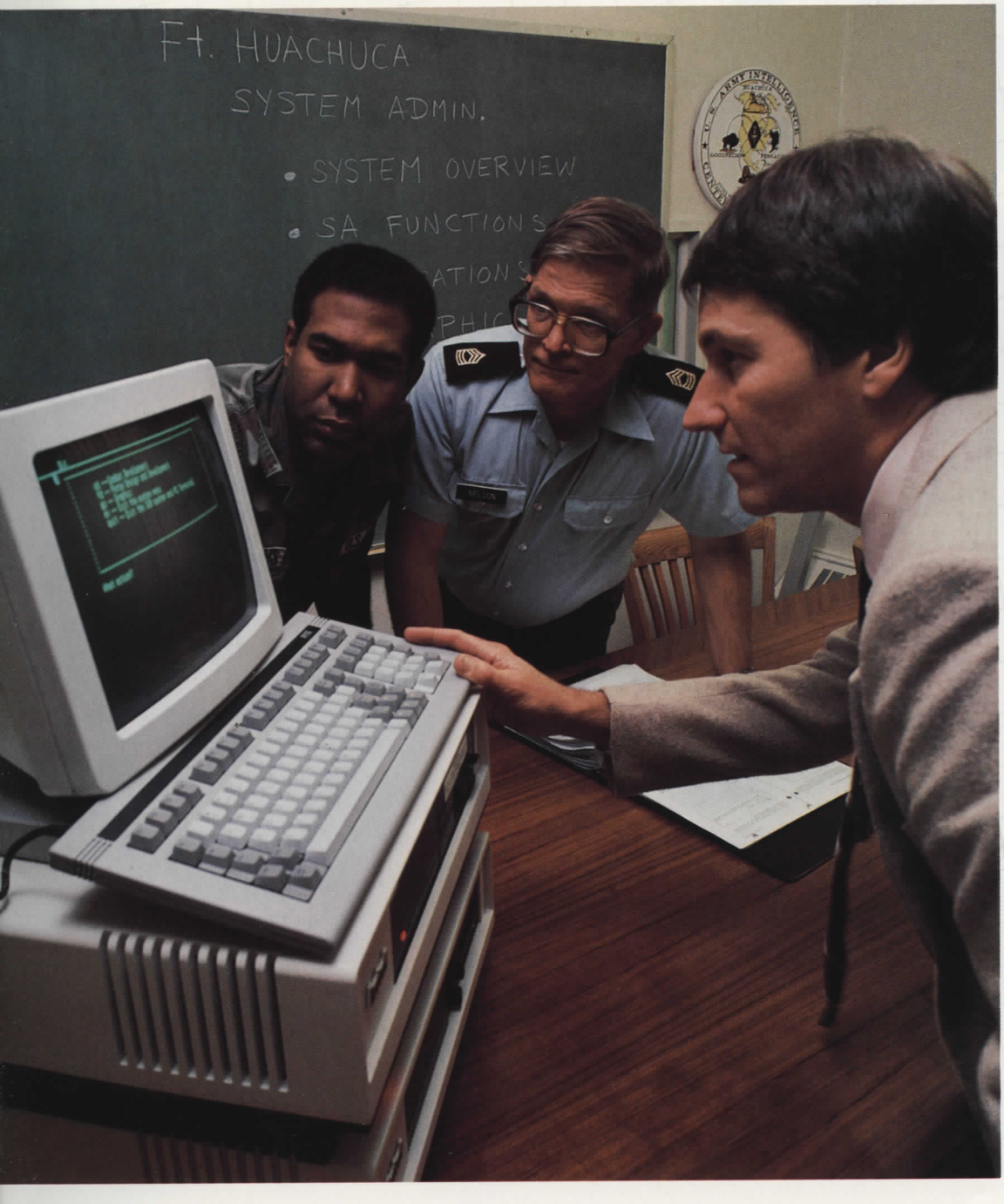
Overall Component Quality
Defects Per Million (DPM) Levels



Intel's field technical staff of several hundred highly trained engineers—the largest field force in the industry—helps our customers bring their products to market quickly and smoothly. This graph shows the relative increase in the size of the U.S. field force since 1977.

Relative Increase in Size of Intel's
U.S. Sales Force





The U.S. Army has become a major customer for Intel systems products. Over the past few months, Intel has trained about 1000 civilian and military users of Intel System 310-based office automation and communications equipment at Ft. Huachuca, Arizona. Here, Hal Thibodeaux (right), Intel Customer Support Representative, trains Lt. Reginald Williams (left) and Sgt. George Nelson.

Part of being our customers' preferred supplier is building close relationships with customers. Teams of Intel employees meet regularly with customers to trouble-shoot any problems and see that customers are satisfied with Intel's service and delivery performance.

Intel customers need a complete line of critical parts to design their products, not just a chip. Thus, Intel's October 1985 introduction of the 386 product family included the 80386 32-bit microprocessor, MULTIBUS® I and MULTIBUS II single-board computers, high-level language compilers, operating systems, a debugger, an in-circuit emulator, support circuits and coprocessor chips.

The RANGER Energy Management System, developed by Ferranti International Controls Corp. of Houston, Texas, is used by utility companies to determine the best power sources at any given time and to distribute power efficiently throughout large metropolitan areas. Dave Schuler (left), Intel Field Applications Engineer, worked closely with Jerry W. Evans (right), Ferranti Project Development Leader and Chief Engineer, to help Ferranti develop the system, which incorporates several Intel products, including 286/12 single-board computers and 80186 microprocessors.

As part of the increased emphasis on timely deliveries, early in 1985 the general managers of all of Intel's operations began meeting monthly to check the company's performance in satisfying the needs of its customers. They go over the 100 or so customers who account for a large share of Intel's business. Areas of concern such as delivery performance are quantified, and the numbers are tracked to assure that Intel's service continues to improve. Items that need work–warehouse throughput times, manufacturing shortages, or problems with scheduling–are flagged for attention.

The company also started its Executive Sponsor Program, in which a customer is assigned a high-level Intel executive who becomes responsible for looking after that customer's interests. The executive sponsor heads up a small team, representing major Intel operations, that works closely with the customer, trouble-shooting any problems and seeing that the customer is satisfied with Intel's performance.

Intel is tackling this problem at other levels as well. Early in the year, in many rounds of presentations at major Intel sites, the planners, production scheduling workers, marketing experts and others who have day-to-day dealings with customers were briefed on the details of the Preferred Supplier Strategy, as well as on how important it is to maintain close ties to the customers. The collective increased awareness of customer needs among all Intel employees is already producing positive results.

At one company, a concerted Intel effort to improve deliveries led to a doubling of orders. At another, on-time deliveries increased to 99 percent, which resulted in that company choosing Intel as the sole supplier of the 80286 microprocessor for a number of its most important divisions.

These kinds of quality, delivery and service improvements are being made not only with Intel's major customers but also with the Intel distributors who in turn serve the tens of thousands of smaller companies that make up a significant portion of Intel's sales. Since Intel does not have the resources to work closely with each and every small customer, the company relies on its distributors to do so. The distributors are therefore a kind of "surrogate Intel" to smaller companies, so Intel works hard to make sure it has strong relationships with its distributors.

"...a microprocessor may mark the time in billionths of a second, but it is of no use if it arrives a week late." Besides emphasizing quality, delivery and supply matters, Intel has stepped up its training programs so distributors can deal with customer needs quickly and effectively. In 1985 alone, Intel provided approximately 35,000 hours of technical training to bring distributors' field engineers up to speed on new products. No other semiconductor manufacturer has such an extensive program.

And last year, the company and its distributors agreed on a Distributor Service Model that spelled out new partnerships in such important areas as margins, product delivery, and technical and business response time.

All of these efforts indicate Intel's awareness that there is much more to the semiconductor industry than advanced electronics; a microprocessor may mark the time in billionths of a second, but it is of no use if it arrives a week late.

The Situation: It is no longer enough to be the first to produce extremely sophisticated products. Today's environment demands an increased emphasis on manufacturing cost reduction and continuity of supply. *The Strategy:* **Be a world-class manufacturer.**

Superior technology and close customer relations will do little good if a company can't manufacture products over their entire life cycles in a cost-effective, efficient manner. Intel's third key strategy deals with making sure that Intel's factories are as productive and competitive as any in the world.

"[Manufacturing] objectives at Intel are far more blunt: 'Make it fast, make it cheap, and make it good.'" Any manufacturing organization has three basic responsibilities: maintaining an efficient production schedule, building quality products, and keeping costs as low as possible. The objectives at Intel are far more blunt: "Make it fast, make it cheap, and make it good."

How fast? Certain production cycles that now take months will be trimmed to weeks.

How cheap? The cost of basic manufacturing steps will be cut by an average of 40 percent over two years. Total output will be doubled–and by doing a better job with current manufacturing resources rather than by adding new ones.

How good? Intel's product defect rate is already so low that many customers have eliminated inspection of products before loading them into their warehouses. More and more customers will institute this type of "dock-to-stock" program in the future.

The key to reaching these ambitious goals involves increasing the use of Intel's manufacturing resources and the productivity of Intel's employees. That requires twin approaches–organizational and technological–as well as many steps, some simple, others requiring striking changes in traditional ways of doing business.

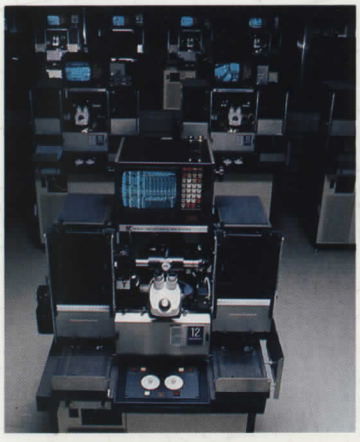
The very nature of Intel's charter as an industry technology leader has forced the company to concentrate on ever-new and ever-more-sophisticated manufacturing technologies. As a result, Intel is among the best companies in the world at making complex semiconductor products, as is demonstrated by products such as the 80386.

"Intel now faces competitors who run extremely cost-effective, efficient, lean manufacturing organizations..." Historically, Intel has emphasized manufacturing cost reduction through new design and process technologies. For example, the company would use its design and technology expertise to shrink the size of a chip, thereby making it possible to build more chips per wafer without an incremental labor cost increase. Or, the company would push to reduce the cost of electronics overall by emphasizing the building of newer-generation products that integrated more functions per chip.

But that is not enough in today's marketplace. Intel now faces competitors who run extremely cost-effective, efficient, lean manufacturing organizations; many of these competitors also have a lower labor cost advantage.

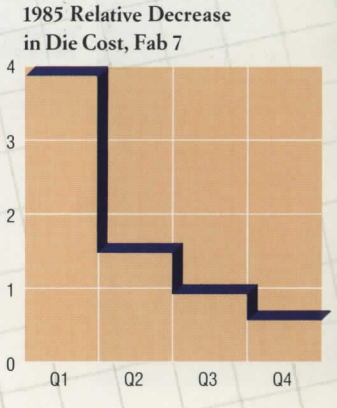
In order to remain competitive with these companies throughout the life cycles of its products, it is now critical that Intel emphasize cost reduction from a manufacturing efficiency standpoint as well as a design and process technology point of view.

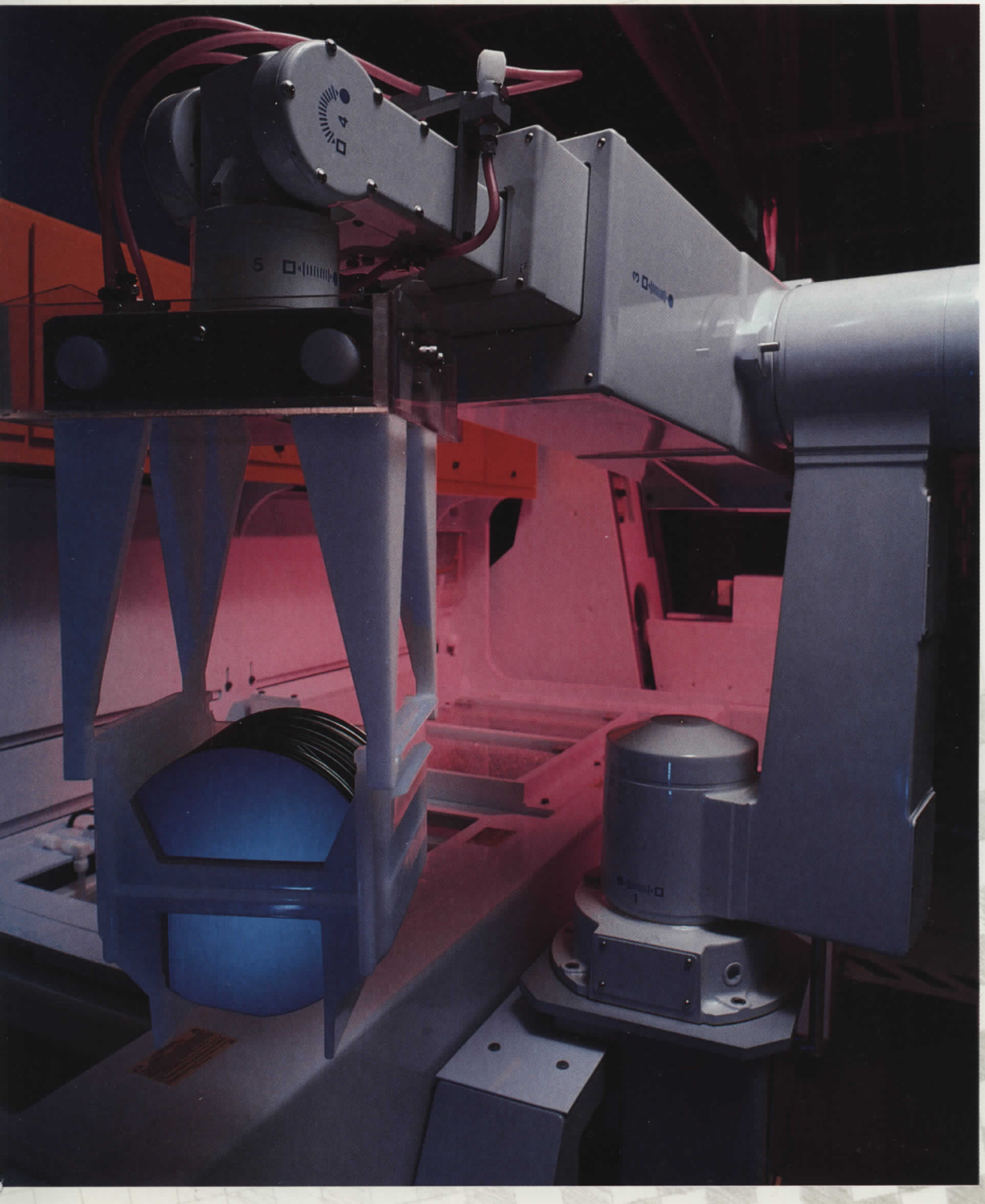
Some of the changes the company is making to accomplish this goal are relatively simple. For example, through improved maintenance and tighter



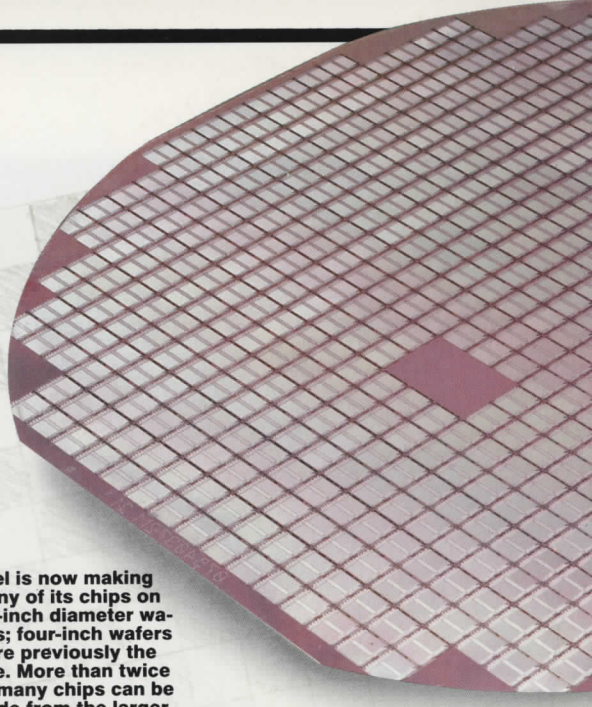
One person can operate five of these highly automated wire bonders simultaneously at Intel's component assembly/test facility in Chandler, Arizona. Automation has driven down the labor cost per part, enabling Intel to build this plant in the U.S. rather than offshore.

Starting up Fab 7, the first six-inch-diameter wafer facility in the industry, was a long, difficult process; but since production began, die costs have dropped steadily, making this fab one of the most efficient in the industry. This chart shows the 1985 relative decrease in cost per die for one of the products manufactured at Fab 7.



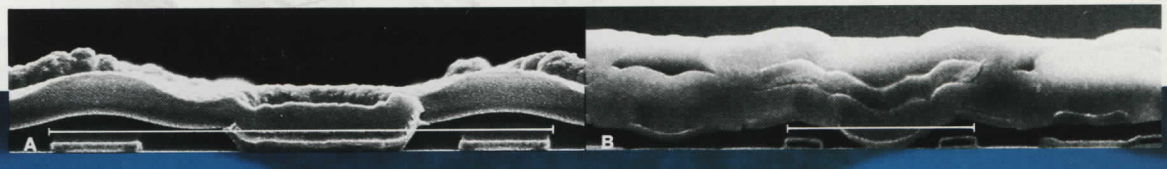


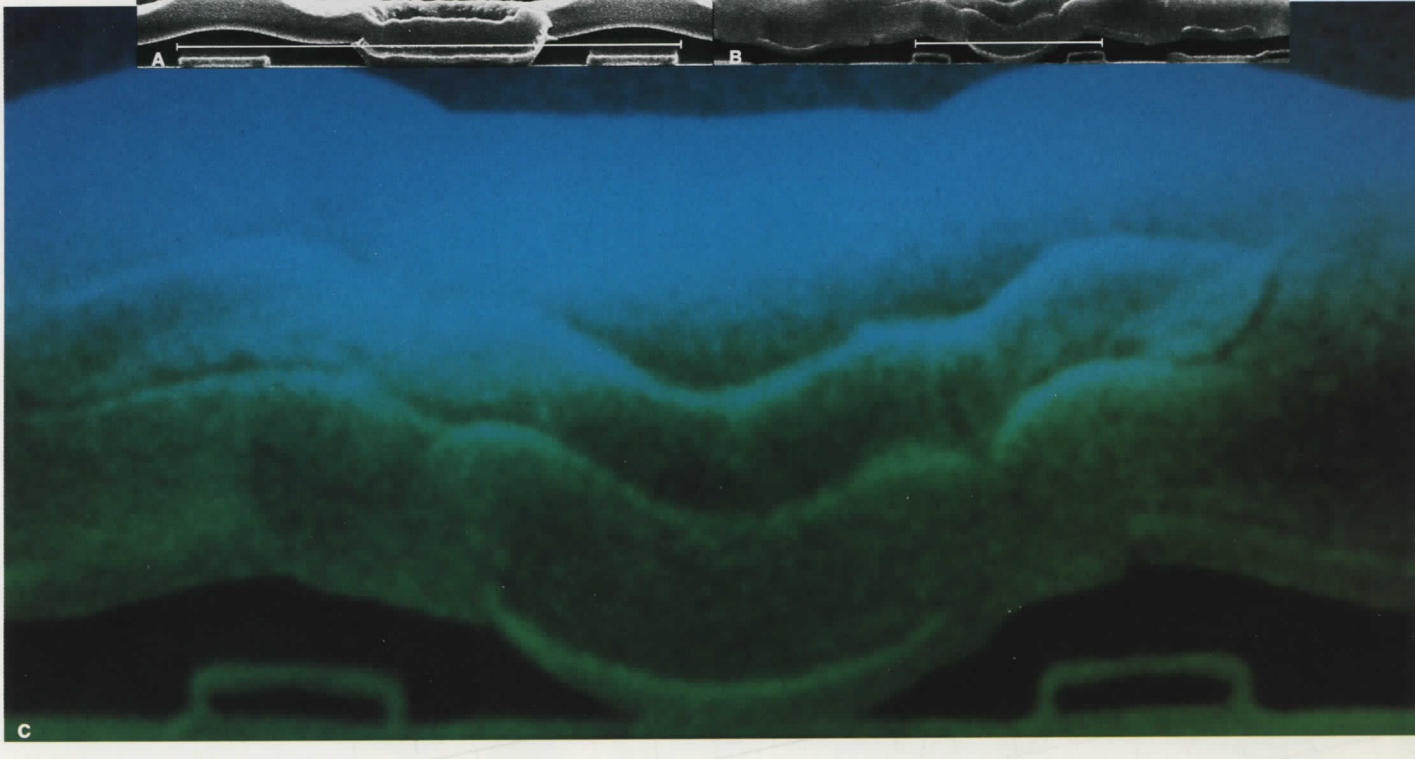
This automated wet station at Intel's Fab 7 in Albuquerque, New Mexico, uses the MAKER 110 Robot, manufactured by United States Robots. This sophisticated robot transfers loads of silicon wafers in and out of acid baths. It can operate around the clock, providing consistent, accurate and safe processing of the wafers.

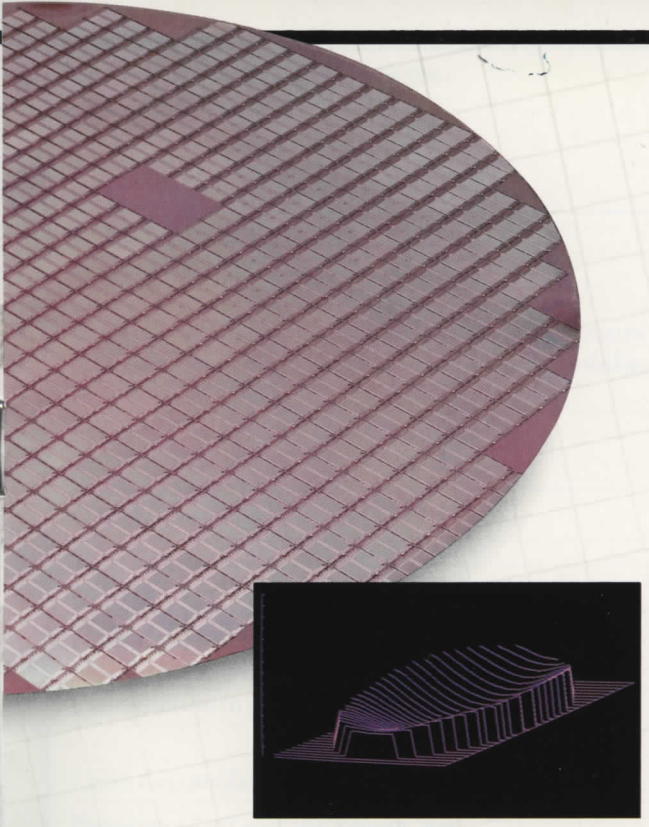


Chips have gotten smaller and denser because of dramatic improvements in process technologies. The scanning electron microscope photos below, magnified several thousand times, contrast 1975 vs. 1985 process technologies. Photo A is a cross-sectional view of a 10-year-old Intel NMOS memory chip. Photo B, magnified exactly as much as Photo A, shows a new memory chip built with Intel's state-of-the-art CHMOS III technology. The new chip is actually about eight times as dense as the old. Highlighted on the top two photos is the space occupied by two transistors. Photo C, which has been artifically color-enhanced, gives an even closer look at the layers on the CHMOS III chip.

Intel is now making many of its chips on six-inch diameter wafers; four-inch wafers were previously the rule. More than twice as many chips can be made from the larger wafers, with almost no increase in labor cost.

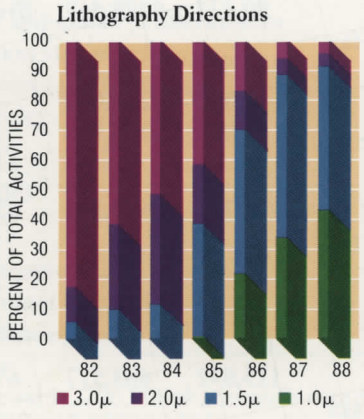




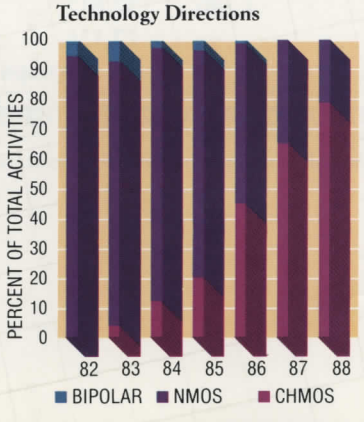


To insure the quality of finished wafers, Intel monitors for variations or defects on the surfaces of blank silicon wafers. This computer graphic shows wafer surface variations, which would not be detectable to the unaided eye.

Thinner line widths allow Intel to create more complex, higher-performance chips on ever-smaller pieces of silicon. The line widths of Intel's advanced lithography processes are about 1.0 micron, or one-millionth of a meter. As this chart shows, 1.0 micron technologies will make up close to half of Intel's wafer fabrication activities by 1988.



CHMOS (Complementary High-Performance Metal Oxide Semiconductor) is becoming the mainstream technology for high-density VLSI because of its low power characteristics. It is the fastest-growing technology in the MOS market. As this graph shows, over a six-year period of time, the portion of Intel's components fabricated in CHMOS grows from zero to eighty percent.



scheduling of both plants and people, the amount of time that manufacturing machines are up and running has been increased. In fact, over the past two years, Intel has doubled the effective output of its wafer steppers, and expects to increase that output by another 50% in the next year.

Once machines are functioning, a related goal is to have them making products non-stop, or as close to that ideal as possible. It was once common to spend a lot of time running test wafers through the entire manufacturing sequence to make sure that all processes were working properly. Now, with closer control of manufacturing, test cycles have been cut by as much as 90%, meaning plants can spend more time making saleable products.

"...there was functional silicon on the first manufacturing run [of the 80386]." The move towards improving manufacturing also involves much larger issues. Intel is reformatting its assembly lines so that products are "pulled" rather than "pushed" through the line. In the latter approach, parts are sent on to the next stage of manufacturing whenever they are finished, regardless of whether the rest of the line is ready for them. But in a "pull" line, a part will only be worked on and passed along if everything else is ready for it.

The major goal of this is to reduce the wasted corporate resources and inflexible manufacturing processes associated with large amounts of work-in-process. Again, the results to date have been striking. Some company assembly and test facilities that once had more than 200 storage cabinets to hold work in process can now get by with only 30. And, because Intel's board products are now "pulled" through the manufacturing line, they are built in five rather than twenty days.

There are also higher levels of coordination involved in this third key strategy. One is to eliminate, as much as possible, the walls that have separated one part of the production process from another. This old type of "hands-off" engineering took place, for example, when the people designing a product were not in close contact with the people who were actually manufacturing it. Now, early in a product's development, a team consisting of everyone needed to bring the product from design to production is brought together to shepherd the product to market.

The success Intel has had with increasing communications between groups and developing a shared sense of responsibility was seen in the 80386. The new microprocessor was such a "hands-on" product that despite the enormous complexity of both the design and the process by which it is being fabricated, there was functional silicon on the first manufacturing run.

Besides these sorts of organizational changes, there are some important technological advances needed to become a world-class manufacturer. For example, Intel is now making many of its chips on six-inch diameter wafers; four-inch was previously the rule. With the larger wafers, more than twice as many chips can be made from each wafer with almost no increase in labor cost.

"There are two kinds of factories: those that are competitive and those that are closed." In a related vein, Intel is making increased use of automation in the many stages of the fabrication, assembly and test processes where machines can be put to productive use. Lasers now etch the part name and Intel logo on each packaged chip. This is not only ten times faster than the ink stamping method previously used, but it yields a higher quality, more permanent mark.

As a result of investments in these types of programs, the average productivity of the Intel manufacturing employee increased 15% last year, and should increase even more in 1986.

These investments come at an appropriate time. As one Intel manager recently put it to a group of colleagues: "There are two kinds of factories: those that are competitive and those that are closed."

Intel Corporation

Consolidated Statements of Income

Three Years Ended December 28, 1985 (Thousands—except per share amounts)	1985	1984	1983
NET REVENUES	**$1,364,982**	**$1,629,332**	**$1,121,943**
Cost of sales	943,435	882,738	624,296
Research and development	195,171	180,168	142,295
Marketing, general and administrative	286,545	315,976	216,635
Operating costs and expenses	1,425,151	1,378,882	983,226
Operating income (loss)	**(60,169)**	**250,450**	**138,717**
Interest and other	54,721	47,699	39,738
Income (loss) before taxes	**(5,448)**	**298,149**	**178,455**
Provision (benefit) for taxes	(7,018)	99,960	62,344
NET INCOME	**$ 1,570**	**$ 198,189**	**$ 116,111**
Earnings per capital and capital equivalent share	**$ .01**	**$ 1.70**	**$ 1.05**
Capital shares and equivalents	**117,850**	**116,765**	**110,544**

See accompanying notes.

Intel Corporation

Consolidated Statements of Shareholders' Equity

Three Years Ended December 28, 1985 (Thousands)	Capital Stock		Retained Earnings	Total
	Number of shares	Amount		
Balance at December 31, 1982	**90,724**	**$189,567**	**$362,286**	**$ 551,853**
Proceeds from sales of shares through employee stock plans, tax benefit of $15,351, and other	3,523	56,780	—	56,780
Proceeds from sale of shares	12,500	250,000	—	250,000
Conversion of 7% convertible subordinated debentures	4,954	146,996	—	146,996
Net Income	—	—	116,111	116,111
Balance at December 31, 1983	**111,701**	**643,343**	**478,397**	**1,121,740**
Proceeds from sales of shares through employee stock plans, tax benefit of $3,678, and other	2,044	37,236	—	37,236
Proceeds from sale of shares	87	2,998	—	2,998
Net Income	—	—	198,189	198,189
Balance at December 31, 1984	**113,832**	**683,577**	**676,586**	**1,360,163**
Proceeds from sales of shares through employee stock plans, tax benefit of $1,448, and other	2,246	32,612	—	32,612
Proceeds from issuance of warrants	—	27,136	—	27,136
Net Income	—	—	1,570	1,570
Balance at December 28, 1985	**116,078**	**$743,325**	**$678,156**	**$1,421,481**

See accompanying notes.

Intel Corporation

Consolidated Balance Sheets

December 28, 1985 and December 31, 1984
(Thousands)

	1985	1984
ASSETS		
Current assets:		
Cash and temporary cash investments	$ 187,911	$ 89,412
Short-term investments (at cost, which approximates market)	173,233	141,240
Accounts receivable, net of allowance for doubtful accounts of $4,656 ($4,725 in 1984)	305,102	354,135
Inventories	170,758	219,314
Prepaid taxes on income	88,849	98,518
Refundable income taxes	58,655	30,000
Other current assets	39,402	25,699
Total current assets	**1,023,910**	**958,318**
Property, plant and equipment:		
Land and buildings	431,183	362,886
Machinery and equipment	725,578	665,555
Construction in progress	181,621	136,293
	1,338,382	1,164,734
LESS Accumulated depreciation	490,136	386,452
Property, plant and equipment, net	**848,246**	**778,282**
Long-term investments (at cost, which approximates market)	**216,340**	**271,747**
Investment in unconsolidated subsidiary	**51,058**	**—**
Other non-current assets	**12,311**	**21,052**
TOTAL ASSETS	**$2,151,865**	**$2,029,399**
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Short-term debt	$ 88,898	$ 65,533
Accounts payable	56,988	79,900
Deferred income on shipments to distributors	72,421	88,413
Accrued compensation and benefits	36,693	33,676
Profit sharing retirement plan accrual	1,643	34,641
Other accrued liabilities	47,155	48,506
Income taxes payable	2,893	39,711
Total current liabilities	**306,691**	**390,380**
Long-term debt	**270,831**	**146,306**
Deferred taxes on income	**133,956**	**112,690**
Unamortized investment tax credits	**18,906**	**19,860**
Commitments and contingencies		
Shareholders' equity:		
Capital stock, no par value, 200,000 shares authorized, 116,078 issued and outstanding in 1985 (113,832 in 1984)	743,325	683,577
Retained earnings	678,156	676,586
Total shareholders' equity	**1,421,481**	**1,360,163**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	**$2,151,865**	**$2,029,399**

(Certain 1984 amounts have been reclassified to conform to the 1985 presentation.)

See accompanying notes.

Intel Corporation

Consolidated Statements of Changes in Financial Position

Three Years Ended December 28, 1985 (Thousands)	1985	1984	1983
Working capital provided by operations:			
Net income	$ 1,570	$198,189	$116,111
Charges to income not involving the current use of working capital:			
Depreciation and net retirements	166,252	113,755	103,007
Non-current portion of deferred taxes on income and deferred investment tax credits	20,312	27,776	20,065
Total working capital provided by operations	188,134	339,720	239,183
Working capital provided by:			
Sale of long-term marketable securities	206,471	—	—
Other assets, net	8,741	5,023	(10,215)
Additions to long-term debt, net	132,092	18,720	120,443
Proceeds from sales of shares through employee stock plans, tax benefits thereof, and other	32,612	37,236	56,780
Proceeds from issuance of warrants, net of issuance costs	27,136	—	—
Proceeds from sale of capital stock	—	2,998	250,000
Issuance of stock due to conversion of 7% convertible subordinated debentures, net of issuance costs	—	—	146,996
Total working capital provided	595,186	403,697	803,187
Working capital used for:			
Additions to property, plant and equipment	236,216	388,445	144,974
Long-term investments, net	151,064	55,095	165,718
Investment in unconsolidated subsidiary	51,058	—	—
Decrease in long-term debt	7,567	—	40,000
Conversion of 7% convertible subordinated debentures	—	—	150,000
Total working capital used	445,905	443,540	500,692
Increase (decrease) in working capital	**$149,281**	**$ (39,843)**	**$302,495**
Increase (decrease) in working capital by component:			
Cash and temporary cash investments	$ 98,499	$ 5,743	$ 49,204
Short-term investments	31,993	(164,168)	254,541
Accounts receivable	(49,033)	51,101	81,818
Inventories	(48,556)	67,411	30,156
Prepaid taxes on income	(9,669)	32,875	34,263
Refundable income taxes	28,655	30,000	(42,674)
Other current assets	13,703	2,025	(2,010)
Short-term debt	(23,365)	15,549	(5,600)
Accounts payable	22,912	(761)	(40,001)
Deferred income on shipments to distributors	15,992	(14,729)	(21,700)
Accrued compensation and benefits	(3,017)	(6,021)	(3,206)
Profit sharing retirement plan accrual	32,998	(32,441)	(2,200)
Other accrued liabilities	1,351	(4,978)	(11,834)
Income taxes payable	36,818	(21,449)	(18,262)
Increase (decrease) in working capital	**149,281**	**(39,843)**	**302,495**
Working capital at beginning of year	567,938	607,781	305,286
Working capital at end of year	**$717,219**	**$567,938**	**$607,781**

(Certain 1984 and 1983 amounts have been reclassified to conform to the 1985 presentation.)

See accompanying notes.

ACCOUNTING POLICIES

Fiscal Year In 1985 the Company changed its accounting period from a fiscal year ended December 31 to a fiscal year ended the last Saturday in December. As a result of this change, fiscal year 1985, a 52 week year, ended on December 28, 1985. This change had no material effect on the Company's 1985 financial statements. The next 53 week year will end on December 31, 1988.

Basis of Presentation The consolidated financial statements include the accounts of Intel Corporation and all of its wholly-owned subsidiaries, except for its banking subsidiary, the investment in which is accounted for under the equity method. Because of the nature of its operations, the assets and liabilities of this subsidiary are not consolidated. Accounts denominated in foreign currencies have been translated in accordance with FASB Statement No. 52, using the U.S. dollar as the functional currency.

Inventories Inventories are stated at the lower of cost or market. Cost is computed on a currently adjusted standard basis (which approximates average or first-in, first-out cost). Market is based upon estimated realizable value reduced by normal gross margin. Inventories at fiscal year-ends are as follows:

(Thousands)	1985	1984
Materials and purchased parts	$ 43,007	$ 58,723
Work in process	57,629	86,475
Finished goods	70,122	74,116
Total	$170,758	$219,314

Property, Plant and Equipment Property, plant and equipment are stated at cost. Depreciation is computed for financial reporting purposes principally by use of the straight-line method over the estimated useful lives of the assets. Accelerated methods of computing depreciation are used for tax purposes.

Deferred Income on Shipments to Distributors Certain of Intel's sales are made to distributors under agreements allowing price protection and right of return on merchandise unsold by the distributors. Because of frequent sales price reductions and rapid technological obsolescence in the industry, Intel defers recognition of such sales until the merchandise is sold by the distributors.

Investment Tax Credits Investment tax credits are accounted for using the deferral method whereby credits are treated as a reduction of the U.S. federal tax provision ratably over the useful lives of the related assets.

Capital Stock Effective June 30, 1983, Intel declared a two-for-one stock split and increased its authorized shares from 75,000,000 to 150,000,000. Shares and per share amounts reported herein have been restated to reflect the effect of this stock split. On March 28, 1984 the shareholders approved an increase in authorized shares from 150,000,000 to 200,000,000.

In 1984 and 1983 the Company sold 86,509 and 12,500,000 shares, respectively, of previously authorized but unissued capital stock to IBM Corporation in accordance with an agreement reached in December 1982. (See Related Party Transactions.)

Earnings Per Capital and Capital Equivalent Share Earnings per share are computed using the weighted average number of outstanding capital shares and capital equivalent shares. Capital equivalent shares include shares issuable under employee stock option plans as determined by the treasury stock method.

Capital equivalent shares relating to the warrants issued in 1985 (see Borrowings) have not been included in the computation of earnings per share because they are antidilutive when considering the exercise price of the warrants.

Shares of capital stock issued in connection with the 1983 conversion of the 7% convertible subordinated debentures (see Borrowings) have been included in the computation of earnings per share only from the time of conversion since they were previously antidilutive when considering interest on the debentures.

BORROWINGS

Intel's borrowings are comprised of short-term debt and long-term debt. Short-term debt at December 28, 1985 consists of $4.5 million of short-term portion of long-term debt, $13.5 million of notes payable, and $70.9 million issued under domestic and foreign lines of credit. At December 28, 1985 Intel had established foreign and domestic lines of credit of approximately $416,000,000. These lines are generally renegotiated on an annual basis. Intel complies with compensating balance requirements related to certain of these lines of credit; however, such requirements are immaterial and do not legally restrict the use of cash. The weighted average interest rate on short-term debt outstanding at December 28, 1985 approximated 7.4%.

Proceeds of $80,000,000 from the Adjustable Rate Industrial Revenue Bonds issued in September, 1983 (the 1983A Bonds) and $30,000,000 issued in December, 1983 (the 1983B Bonds) by the Puerto Rico Industrial, Medical and Environmental Pollution Control Facilities Financing Authority (the Authority) have been loaned to the Company. In accordance with loan agreements between the Company and the Authority, the Company has guaranteed repayment of principal and interest on these Bonds, which are subject to redemption prior to maturity upon the occurrence of certain events. The 1983A Bonds are due September 1, 2013, bear interest at 8% through August 1988 and are adjustable and redeemable (at the option of either the Company or the bondholder) every five years beginning September 1988 through September 2008 in accordance with certain formulas. The 1983B Bonds are due December 1, 2013, bear interest at 7.95% through November 1988 and are adjustable and redeemable (at the option of either the Company or the bondholder) every five years beginning

December 1988 through December 2008 in accordance with certain formulas. As a result of the redemption options, this debt has been included in the 1988 debt maturities noted below.

In connection with these agreements, the Company is obligated to spend a total of $110,000,000 to finance expansion in Puerto Rico. As of December 28, 1985, the Company had spent $66,300,000. The remainder of the Company's commitment is restricted and invested in interest-bearing securities. (See Investments.) Long-term debt at December 28, 1985 and December 31, 1984 and 1983 includes $110,000,000 of Intel's obligations under these agreements with the Puerto Rico Authority.

The 7% convertible subordinated debentures issued in August 1980 were called on September 14, 1983 for redemption on October 14, 1983. $149,875,000 were converted into 4,954,000 shares of capital stock and the remaining $125,000 were redeemed subject to a premium of 5.95% and accrued interest through October 14, 1983.

On January 29, 1985 the Company issued Yen 12.5 billion (approximate U.S. dollar equivalent of $49 million) 6 5/8% Yen Guaranteed Bonds, due January 29, 1992. As of December 28, 1985, approximately $42 million of these bonds were outstanding and the proceeds were invested in both short-term and long-term interest-bearing instruments. The loan has been hedged for currency fluctuations, resulting in an effective dollar interest rate of 11.38%.

On May 20, 1985, the Company issued $236,500,000 aggregate principal amount of zero coupon notes with detachable warrants. The warrants entitle the holders to purchase 5,912,000 shares of Capital Stock reserved for issuance at an exercise price of $40 per share through May 15, 1995. These warrants are subject to acceleration by Intel upon the occurrence of certain events. $27,136,000, representing the original value of the warrants net of related offering expenses, is included in paid-in capital. The notes are due May 15, 1995 and have an effective yield to maturity of 11.75%, compounded semiannually with interest paid at maturity. As of December 28, 1985, $81,080,000 of notes were outstanding, net of unamortized discount. Net proceeds of this offering ($101,000,000) have been invested in short-term and long-term interest-bearing investments.

The remaining long-term debt represents primarily low-interest borrowings from a foreign government in conjunction with construction in that country and is due at varying dates through 1996.

As of December 28, 1985, aggregate debt maturities are as follows: 1986—$4.5 million; 1987—$3.1 million; 1988—$118.0 million; 1989—$2.8 million; 1990—$2.8 million; and thereafter—$299.5 million.

INTEREST AND OTHER

(Thousands)	1985	1984	1983
Interest income	$53,345	$57,063	$46,256
Interest expense	(19,408)	(11,336)	(16,177)
Foreign currency gains	5,449	4,300	3,497
Other income (expense)	15,335	(2,328)	6,162
Total	$54,721	$47,699	$39,738

Interest expense for 1985, 1984, and 1983 excludes $6,273,000, $3,642,000, and $573,000, respectively, which was capitalized as a component of construction costs. Other income for 1985 represents a gain from the sale of long-term marketable securities and income from other investments. Other income for 1983 includes the gain realized on the sale of assets and the sale of an investment in common stock accounted for under the cost method.

INVESTMENTS

Investments consist of marketable securities, Eurodollar deposits, precious metals which are hedged by forward contracts, and investments under repurchase agreements. Investments with maturities of greater than one fiscal year and restricted investments are classified as long-term. (See Borrowings.)

INVESTMENT IN UNCONSOLIDATED SUBSIDIARY

During 1985 the Company formed a wholly-owned foreign banking subsidiary which is accounted for under the equity method. Assets of this subsidiary of $51 million consist primarily of loans to third-party financial institutions. Revenues and earnings of this subsidiary in 1985 are immaterial.

PROVISION (BENEFIT) FOR TAXES

Income (loss) before taxes and the provision (benefit) for taxes consist of the following:

(Thousands)	1985	1984	1983
Income (loss) before taxes:			
U.S.	$(56,949)	$159,535	$ 84,550
Foreign	51,501	138,614	93,905
Total income (loss) before taxes	$ (5,448)	$298,149	$178,455
Provision (benefit) for taxes:			
Federal			
Current	$(62,639)	$ 34,756	$ 20,220
Deferred (prepaid)	31,650	5,865	1,904
	(30,989)	40,621	22,124
State			
Current	—	20,718	12,331
Deferred (prepaid)	—	(2,829)	(1,624)
	—	17,889	10,707
Foreign			
Current	25,640	38,962	33,503
Deferred (prepaid)	(1,669)	2,488	(3,990)
	23,971	41,450	29,513
Total provision (benefit) for taxes:	$ (7,018)	$ 99,960	$ 62,344
Effective tax rate	—	34%	35%

The provision (benefit) for taxes reconciles to the amount computed by applying the statutory Federal rate to income (loss) before taxes as follows:

(Thousands)	1985	1984	1983
Computed expected tax	$(2,506)	$137,149	$82,088
State taxes, net of Federal benefits	—	9,660	5,782
Amortization of investment tax credits	(9,470)	(9,177)	(7,772)
Research and experimental credits	(7,900)	(9,796)	(6,431)
Reversal of deferred tax on prior years' DISC income	—	(19,300)	—
Provision for combined foreign and U.S. taxes on certain foreign income at rates in excess of U.S. rate	11,181	—	—
Other	1,677	(8,576)	(11,323)
Provision (benefit) for taxes	$(7,018)	$ 99,960	$62,344

The 1984 reversal of deferred tax on prior years' DISC income is due to the Tax Reform Act of 1984 which provided for the forgiveness of such deferred tax for the years 1972 through 1984.

Deferred (prepaid) income taxes result from differences in the timing of certain revenue and expense items for tax and financial reporting purposes. The sources and tax effects of these differences are as follows:

(Thousands)	1985	1984	1983
Inventory valuation	$(18,662)	$(20,150)	$ (6,932)
Distributor sales and other reserves	3,695	(6,339)	(16,863)
Undistributed earnings of foreign subsidiaries and DISC	24,077	(6,911)	19,077
Deferred ITC	(954)	4,404	(1,509)
Depreciation	13,002	28,783	8,791
Prepaid medical benefits	6,939	—	—
State and local tax accruals	4,807	(2,919)	(1,818)
Other, net	(2,923)	8,656	(4,456)
Deferred (prepaid) income taxes	$ 29,981	$ 5,524	$ (3,710)

Intel's U.S. income tax returns for the years 1978 through 1982 are presently under examination by the Internal Revenue Service. Management believes that adequate amounts of tax have been provided for any adjustments which may result.

EMPLOYEE BENEFIT PLANS

Stock Option Plans Intel has stock option plans under which officers and key employees may be granted options to purchase shares of Intel's authorized but unissued capital stock at not less than the fair market value at date of grant. In January 1984, 15,000,000 shares were reserved by the Board of Directors for issuance under the 1984 Stock Option Plan. This plan was approved by the shareholders in March 1984.

Options expire no later than ten years from date of grant. No material charges have been made to income in accounting for options. Proceeds realized by Intel as a result of transactions in these plans are credited to capital stock. Income tax benefits are credited to capital stock only for those years in which the Company can realize the benefits. Additional information with respect to employee stock options is as follows:

(Thousands)	Shares Available For Options	Outstanding Options	
		Number of Shares	Aggregate Price
December 31, 1982	5,552	10,210	$107,610
Options granted	(3,283)	3,283	105,120
Options exercised	—	(2,490)	(20,618)
Options cancelled	759	(759)	(10,269)
Options cancelled under expired plans	(433)	—	—
December 31, 1983	2,595	10,244	$181,843
Additional shares reserved	15,000	—	—
Options granted	(3,164)	3,164	108,727
Options exercised	—	(1,288)	(12,610)
Options cancelled	629	(629)	(13,726)
Options cancelled under expired plans	(60)	—	—
December 31, 1984	15,000	11,491	$264,234
Options granted	(7,072)	7,072	174,004
Options exercised	—	(1,287)	(14,743)
Options cancelled	5,272	(5,272)	(175,271)
Options cancelled under expired plans	(53)	—	—
December 28, 1985	13,147	12,004	$248,224
Options exercisable at:			
December 31, 1983		3,021	$ 29,437
December 31, 1984		1,759	$ 15,207
December 28, 1985		3,736	$ 55,092

On December 17, 1984 employees holding options to purchase 5,198,000 shares of Intel capital stock were offered the opportunity to exchange their existing options for the same number of options at the then current market price. This offer was made because management believed that the higher-priced options were no longer a motivating factor for key employees and officers. As of December 31, 1984, no exchanges had taken place and, therefore, no effect is reflected in the information for 1984. All cancellations and regrants of options related to these exchanges are included in 1985 activity.

The average exercise price for options outstanding at December 28, 1985 was $20.68 while the range of individual exercise prices was $5.00 to $45.13. Individual options outstanding at that date will expire if not exercised at specific dates ranging from January 1986 to December 1995. The range of exercise prices for options exercised during the three year period ended December 28, 1985 was $1.38 to $29.94.

In 1983, 180,000 shares of authorized but previously unissued Intel stock were issued to key employees of one of the Company's subsidiaries in connection with a separate stock compensation plan. The fair market value of the Intel stock issued in connection with this plan had previously been charged to income.

Stock Participation Plan Under this plan, qualified employees are entitled to purchase shares of Intel's capital stock at 85% of the fair market value at certain specified dates. Of the 8,000,000 shares authorized to be issued under this plan, as amended, 1,177,000 shares are available for issuance at December 28, 1985. Employees purchased 1,011,000 shares in 1985 (781,000 and 905,000 in 1984 and 1983, respectively) for $23,053,000 ($22,137,000 and $14,220,000 in 1984 and 1983, respectively).

Profit Sharing Retirement Plan Effective July 1, 1979, Intel adopted a profit sharing retirement plan for the benefit of qualified employees. The plan is designed to provide employees with an accumulation of funds at retirement and provides for annual contributions to trust funds based on formulas determined by the Board of Directors. Nothing was accrued under the profit sharing retirement plan for 1985. $33,170,000 was accrued for 1984 and $950,000 for 1983.

Contributions generally vest five years after each plan year or upon retirement (certain portions vest immediately). In 1985 the IRS approved amendments providing for the accelerated vesting of certain previously unvested fund assets. It is management's intention to fund contributions on a current basis.

In addition to the contributions noted above, approximately $1,643,000, $1,471,000, and $1,250,000 in 1985, 1984, and 1983, respectively, was accrued for the Company's Payroll Based Tax Credit Employee Stock Ownership Plan (PASOP) program. Under this program, shares of Company stock are purchased for the benefit of qualified employees based on a percentage of qualified compensation, as defined. Shares credited to employees under this program vest immediately and are subject to withdrawal upon the earlier of termination of employment or 84 months from date of contribution.

COMMITMENTS

Intel leases a portion of its capital equipment and certain of its facilities under leases which expire at various dates through 2009. Rental expense was $33,400,000 in 1985, $29,500,000 in 1984, and $19,700,000 in 1983. Minimum rental commitments under all non-cancelable leases with an initial term in excess of one year are payable as follows: 1986—$23,300,000; 1987—$17,700,000; 1988—$12,400,000; 1989—$7,900,000; 1990—$2,900,000; 1991 and beyond—$6,300,000.

Commitments for construction or purchase of property, plant, and equipment approximate $58 million at December 28, 1985.

In connection with financial inducements provided to Intel to construct and equip certain manufacturing facilities within a foreign country, Intel has agreed to continue to operate its manufacturing facilities within that country. The financial inducements include a combination of grants and low-interest loans to fund a major portion of this project. These loans are secured by the facilities and equipment. (See Borrowings.)

CONTINGENCIES

The Company is a defendant in a lawsuit filed by Hughes Aircraft Corporation (Hughes) in a U.S. Federal Court in 1983. The suit alleges that the Company willfully infringed and continues to infringe three patents relating to ion implantation. Hughes' complaint seeks unspecified monetary damages and an injunction against further alleged infringement. A May 1986 trial date has been set, but this date is contingent upon a resolution of another lawsuit by a third party against Hughes.

The Company believes it has several meritorious defenses to the lawsuit and is contesting the lawsuit vigorously. The ultimate outcome of this matter cannot be determined at this time. Management, including internal counsel, does not believe that the outcome will have a material adverse effect on the Company's financial position or a material adverse impact on overall trends in results of operations.

The Company has been named to the California and proposed Federal Superfund lists and has signed a consent order with the Federal Environmental Protection Agency (EPA) to perform a Remedial Investigation/Feasibility Study to evaluate the ground water in a certain area. In addition, the Company has done extensive cleanup and studies of its site within this area. Although the liability, if any, to the Company arising out of these matters cannot be determined at this time, in the opinion of management, the ultimate resolution will not have a material adverse effect on the Company's financial position or overall trends in results of operations.

The Company is party to various other legal proceedings. In the opinion of management, none of these proceedings will have a material adverse effect on the financial position or overall trends in results of operations of the Company.

INDUSTRY SEGMENT REPORTING

Intel and its subsidiaries operate in one dominant industry segment. The Company is engaged principally in the design, development, manufacture, and sale of semiconductor components and related products. In 1985, 1984 and 1983, approximately 19.9%, 11.9% and 8.6%, respectively, of Intel's revenues were derived from sales to one significant customer. (See Related Party Transactions.)

Major operations outside the United States include manufacturing facilities in Barbados, Israel, Malaysia, the Philippines, and Singapore, and sales subsidiaries throughout Europe and other parts of the world. Summary balance sheet information for operations outside of the United States at fiscal year end is as follows:

(Thousands)	1985	1984
Total assets	$496,780	$397,749
Total liabilities	$192,547	$143,484
Net property, plant and equipment	$174,857	$159,846

Geographic information for the three years ended December 28, 1985 is presented in the tables below. Transfers between geographic areas are accounted for at amounts which are generally above cost and consistent with rules and regulations of governing tax authorities. Such transfers are eliminated in the consolidated financial statements. Operating income by geographic segment does not include an allocation of general corporate expenses. Identifiable assets are those assets that can be directly associated with a particular geographic area. Corporate assets include principally cash, short-term investments, prepaid taxes on income, and refundable income taxes.

(Thousands)	U.S.	Europe	Other	Eliminations	Corporate	Consolidated
1985						
Sales to unaffiliated customers	$ 893,410	$361,523	$110,049	$ —	$ —	$1,364,982
Transfers between geographic areas	315,586	—	113,134	(428,720)	—	—
Net revenues	$1,208,996	$361,523	$223,183	$(428,720)	$ —	$1,364,982
Operating income (loss)	$ (19,334)	$ 43,681	$ 202	$ 14,673	$ (99,391)	$ (60,169)
Identifiable assets	$1,315,396	$159,554	$337,226	$(120,139)	$459,828	$2,151,865
1984						
Sales to unaffiliated customers	$1,159,392	$317,947	$151,993	$ —	$ —	$1,629,332
Transfers between geographic areas	310,549	—	107,856	(418,405)	—	—
Net revenues	$1,469,941	$317,947	$259,849	$(418,405)	$ —	$1,629,332
Operating income	$ 259,722	$ 45,477	$ 49,381	$ (12,742)	$ (91,388)	$ 250,450
Identifiable assets	$1,429,541	$143,463	$254,286	$ (97,868)	$299,977	$2,029,399
1983						
Sales to unaffiliated customers	$ 809,035	$208,376	$104,532	$ —	$ —	$1,121,943
Transfers between geographic areas	191,055	—	67,142	(258,197)	—	—
Net revenues	$1,000,090	$208,376	$171,674	$(258,197)	$ —	$1,121,943
Operating income	$ 142,065	$ 35,805	$ 24,475	$ (12,318)	$ (51,310)	$ 138,717
Identifiable assets	$1,072,599	$ 98,783	$172,779	$ (71,149)	$406,638	$1,679,650

RELATED PARTY TRANSACTIONS

In February, 1983 International Business Machines Corporation (IBM) became a related party due to its purchase of Intel stock (see Capital Stock). In 1985 approximately 19.9% of Intel's revenues were derived from sales to IBM (11.9% in 1984 and 8.6% in 1983). In addition, Intel had purchases from IBM (including lease obligations) of approximately $7 million in 1985 ($24 million in 1984 and $12 million in 1983). Amounts receivable from and payable to IBM are immaterial at December 28, 1985.

SUPPLEMENTAL INFORMATION (unaudited)

Inflation Adjusted Information A financial summary which has been adjusted for changing prices to reflect the effects of inflation is presented on page 30.

Quarterly Information Quarterly information for each of the two years in the period ended December 28, 1985 is presented on page 32.

Intel Corporation

Financial Summary

Ten Years Ended December 28, 1985 (Thousands-except per share amounts)

	Net Investment in Plant & Equip.	Total Assets	Long Term Debt	Share-holders' Equity	Working Capital Provided by: Operations	Working Capital Provided by: Employee Stock Plans	Working Capital Used for Additions to Plant & Equip.
1985	$848,246	$2,151,865	$270,831	$1,421,481	$188,134	$32,612	$236,216
1984	778,282	2,029,399	146,306	1,360,163	339,720	37,236	388,445
1983	503,592	1,679,650	127,586	1,121,740	239,183	56,780	144,974
1982	461,625	1,056,452	197,143	551,853	135,570	33,990	138,085
1981	411,747	871,517	150,000	487,817	118,283	27,598	157,426
1980	320,559	767,168	150,000	432,860	157,606	32,930	156,006
1979	217,391	500,093	—	303,189	124,961	19,869	96,681
1978	160,140	356,565	—	205,062	78,025	12,025	104,157
1977	80,117	221,246	—	148,942	49,777	7,766	44,881
1976	51,069	156,568	—	109,460	38,018	10,073	32,073

	Net Revenues	Cost of Sales	Research & Development	Operating Income (Loss)	Net Income Total	Net Income Per Share
1985	$1,364,982	$943,435	$195,171	$(60,169)	$ 1,570	$ .01
1984	1,629,332	882,738	180,168	250,450	198,189	1.70
1983	1,121,943	624,296	142,295	138,717	116,111	1.05
1982	899,812	541,928	130,801	28,443	30,046	.32
1981	788,676	458,308	116,496	29,579	27,359	.31
1980	854,561	399,438	96,426	183,120	96,741	1.11
1979	660,984	313,106	66,735	149,169	77,804	.92
1978	399,390	196,376	41,360	85,043	44,314	.54
1977	282,549	143,979	27,921	63,146	31,716	.40
1976	225,979	117,193	20,709	51,457	25,214	.32

RESULTS OF OPERATIONS

Revenues of $1.4 billion in 1985 were 16% below the record level of $1.6 billion in 1984 and represented an abrupt halt to the growth in revenues experienced over the previous two years (45% growth in 1984 and 25% growth in 1983). Throughout 1983 and most of 1984, the market for semiconductor devices was strong with demand exceeding supply on many products. This resulted in unusually stable prices accompanying increased unit shipments. In late 1984 the growth in the small-computer market moderated, allowing the supply of semiconductor devices to catch up with demand, leading to significantly lower selling prices as well as lower than anticipated volumes across most product lines. These trends worsened throughout 1985. Pricing pressure across all product lines intensified in 1985 as excess capacity became available throughout the industry. This pressure was increased by Japanese suppliers "dumping" certain memory products in the U.S. market (as evidenced by the preliminary determination of injury by the U.S. Government). Demand is still weak, pricing pressure continues, and the level of new orders is still not adequate to sustain current revenue levels. As we enter 1986, we are experiencing no substantial relief from these trends which led to significant operating losses in the second half of 1985.

Gross profit margins decreased to 31% in 1985 from 46% in 1984 and 44% in 1983. During the last quarter of 1985, gross margin dropped to 25% and current market conditions do not support improvement. This precipitous decline in gross margin is due to the pricing pressures noted above and the high cost of carrying excess manufacturing capacity. The strong demand experienced in 1983 and 1984 led the Company to increase capacity, including facilities, equipment and people, to keep up with demand. As the market weakened in late 1984, the costs of carrying this capacity began to adversely impact gross margin. Various cost-cutting measures have been taken throughout 1985, including layoffs, plant closings, days off without pay, postponement of merit pay increases and a general effort to trim spending levels in all parts of the Company. Worldwide employment has declined to 21,300 as of December 28, 1985, compared to 25,400 a year ago. Construction of several plants has been stopped until the need for additional capacity is again apparent. Although these efforts to reduce costs have been effective, they have not been enough to offset the negative impact on gross margin caused by falling prices, weak demand and the cost of carrying excess manufacturing capacity.

For the first year since 1971, the Company posted a net operating loss for the year. After increases in operating income in each of the previous two years (from $28 million in 1982 to $139 million in 1983 and to $250 million in 1984) the operating loss of $60 million in 1985 represented a decrease in results from operations of $310 million. This decrease is due primarily to the decrease in gross margin discussed above and until gross margins recover substantially, operating losses will continue to be significant. Research and development expenses constituting 14.3%, 11.1%, and 12.7%, respectively, of 1985, 1984 and 1983 revenues were increased in spite of the decline in revenue, in keeping with the Company's commitment to maintain spending levels on key development projects. Marketing, general and administrative expenses decreased in 1985 as the Company strived to control costs. Although various cost cutting measures were undertaken throughout the year, revenue dropped faster than these expenses, which increased to 21% of revenue versus 19% in both 1984 and 1983.

Net interest and other income increased $7 million over 1984, which had increased $8 million over 1983. The increase in 1985 was due primarily to $15.3 million in gains on the sale of long-term marketable securities and income from other investments. Interest income decreased from 1984 to 1985 due to lower interest rates. Interest expense increased due to higher borrowing balances in 1985.

While the Company had a pretax loss in 1985, the tax benefits of U.S. losses and tax credits exceeded the provision for foreign taxes, resulting in a $7 million tax benefit and net income for the year. In 1984, a year of significant profits, the effective tax rate was 34% (35% in 1983) which reflects a normalized tax provision reduced by the one-time reversal of $19.3 million of deferred tax on prior years' income of the Company's Domestic International Sales Corporations (DISCs). Without the DISC impact, the effective tax rate in 1984 would have been 40%.

FINANCIAL CONDITION

Although the semiconductor industry has been in an extended downturn and the Company's results of operations have been severely impacted by the economic environment, the Company's financial condition remains strong. The Company has working capital, cash and investments sufficient to maintain its operations in the current uncertain business climate and management believes that the Company is in a solid financial position.

Working capital of $717 million represents an increase of $149 million from the prior year. This increase is primarily the result of the Company's offerings of $236.5 million aggregate principal amount of zero coupon notes with detachable warrants (net proceeds of $101 million) and Yen 12.5 billion 6 5/8% Yen Guaranteed Bonds (approximately $42 million U.S. dollar equivalent outstanding at December 28, 1985) (see Borrowings) plus funds generated from operations. As of December 28, 1985, the Company had a long-term debt-to-equity ratio of approximately .2:1. Additions to property, plant and equipment decreased to $236 million in 1985 from $388 million in 1984 as the Company scaled down its building programs in light of the downturn in the industry. The Company has adequate cash and available foreign and domestic lines of credit to continue to invest in the technology and equipment needed to develop next-generation products and support current operations. Management continues to feel comfortable with the Company's portfolio of products, its available plant capacity, and its ability to grow when business improves.

See the following pages for financial summaries and a discussion of the impacts of inflation and changing prices.

Intel Corporation

Statement of Income Adjusted for Changing Prices

(unaudited)

For the Year Ended December 28, 1985 (Millions—except per share amounts)	As Reported in the Primary Statements	Adjusted for Changes in Specific Prices (Current Cost)
NET REVENUES	$1,365.0	$1,365.0
Cost of sales	943.4	947.9
Research and development	195.2	196.2
Marketing, general and administrative	286.5	287.2
Interest and other (income)	(54.7)	(54.7)
Provision (benefit) for taxes	(7.0)	(7.0)
NET INCOME (LOSS)	**$ 1.6**	**$ (4.6)**
Earnings (loss) per capital and capital equivalent share	**$ .01**	**$ (.04)**
OTHER ADJUSTED INFORMATION		
Depreciation included in costs and expenses above	$ 149.0	$ 155.2
Purchasing power loss on net monetary items held during the year		$ 18.5
Current cost amount of inventory and property, plant and equipment at fiscal year end[(A)]		$1,122.9
Increase in specific prices of inventories and property, plant and equipment (net) held during the year		$ 27.0
Effect of increase in general price level		$ 38.9
Excess of increase in general price level over increase in specific prices		$ 11.9

(A) Current cost values of net inventories and property, plant and equipment were $172.1 million and $950.8 million, respectively, at December 28, 1985.

Intel Corporation

Five Year Comparison of Selected Financial Data Adjusted for Changing Prices

(unaudited)

Five Years Ended December 28, 1985 (Millions-except per share data)	1985	1984	1983	1982	1981
Net revenues	$1,365.0	$1,685.8	$1,210.6	$1,001.5	$932.9
Current cost information:					
Net income (loss)	$ (4.6)	$ 195.0	$ 114.4	$ 25.0	$ 20.1
Earnings (loss) per share	$ (.04)	$ 1.67	$ 1.03	$ .28	$ .23
Net assets at year end	$1,521.7	$1,494.9	$1,295.6	$ 682.2	$652.9
Excess of increase in general price level over increase in specific prices of inventories and property, plant, and equipment	$ 11.9	$ 14.5	$ (20.1)	$ 4.4	$ 12.0
Purchasing power loss on net monetary items	$ 18.5	$ 23.5	$ 13.2	$ 3.5	$ 7.9
Market price per common share	$ 28.77	$ 28.39	$ 44.27	$ 20.89	$12.93
Average Consumer Price Index (1967 = 100.0)	322.2*	311.1	298.4	289.1	272.4

Adjusted data on dividends per common share is not presented, because no cash dividends have ever been paid by the Company.

*Estimated

The Statement of Income and other selected financial data adjusted for changing prices are presented in accordance with the requirements of FASB Statement No. 33, as amended by FASB Statement No. 82. The former pronouncement was experimental in nature and required the presentation of two types of supplemental information, constant dollar and current cost. The latter pronouncement eliminates the requirement for disclosure of the constant dollar information.

Current cost data is presented here as a supplement to the traditional financial statements. These amounts are computed based on specific indices relevant to Intel's capital assets. The following explanatory comments are provided to assist in understanding the restated data.

INCOME STATEMENT

Historical operating expenses have been restated into current cost amounts by adjusting their depreciation components. The adjusted depreciation expense is calculated by restating the historical cost of assets acquired in prior years into average 1985 dollars using the relevant index and calculating depreciation thereon using the same methods and estimated useful lives as used in the traditional statements. No adjustments have been made to the provision (benefit) for taxes for deferred taxes that might be deemed to arise as a result of differences between income (loss) on a current cost basis and income (loss) reported for tax purposes.

PURCHASING POWER LOSS

The economic significance of monetary items (cash, receivables, and obligations of fixed amounts) is related to the general purchasing power of money. During an inflationary period, companies experience purchasing power gains from holding net monetary liabilities and purchasing power losses from holding net monetary assets. As a result of holding net monetary assets, Intel experienced purchasing power losses in 1985 and in each of the four preceding years.

INVENTORY AND PROPERTY, PLANT AND EQUIPMENT

The current costs of property, plant and equipment and the depreciation component of inventory have also been computed based on the specific indices mentioned above. No other adjustments have been made to inventories since historical costs approximate current costs. In 1985, the change in the current costs of these assets was impacted more by changes in the general price level than by increases in specific prices.

FIVE YEAR COMPARISON

All data presented for prior years have been restated into average 1985 dollars using the Consumer Price Index for All Urban Consumers (CPI-U).

SUMMARY

The restatement of financial data into current costs requires that numerous assumptions and estimates be made. These financial results should, therefore, be considered in that context and not as precise indicators of the effects of changing prices on the Company.

REPORT OF CERTIFIED PUBLIC ACCOUNTANTS

The Board of Directors and Shareholders
Intel Corporation

We have examined the accompanying consolidated balance sheets of Intel Corporation at December 28, 1985 and December 31, 1984, and the related consolidated statements of income, shareholders' equity and changes in financial position for each of the three years in the period ended December 28, 1985. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the statements mentioned above present fairly the consolidated financial position of Intel Corporation at December 28, 1985 and December 31, 1984, and the consolidated results of operations and changes in financial position for each of the three years in the period ended December 28, 1985, in conformity with generally accepted accounting principles applied on a consistent basis during the period.

Arthur Young & Company
San Jose, California
January 12, 1986

FINANCIAL INFORMATION BY QUARTER (unaudited)

(Thousands—except per share data)	Quarter Ended			
1985	Dec.28	Sept.28	Jun.29	Mar.30
Net revenues	$317,946	$311,741	$360,046	$375,249
Cost of sales	$238,355	$216,160	$240,977	$247,943
Net income (loss)	$(14,905)[B]	$ (3,596)[B]	$ 9,247	$ 10,824
Earnings (loss) per capital and capital equivalent share	$ (.13)[C]	$ (.03)[C]	$ .08	$ .09
Market price range—Capital stock[A] High	$ 30.75	$ 29.75	$ 29.25	$ 32.00
Low	$ 21.75	$ 24.75	$ 23.00	$ 24.50
Market price range—Warrants[A] High	$ 7.25	$ 7.38	$ 5.25	—
Low	$ 5.00	$ 5.13	$ 4.00	—

1984	Dec.31	Sept.30	Jun.30	Mar.31
Net revenues	$416,095	$431,580	$410,087	$371,570
Cost of sales	$265,827	$226,780	$204,089	$186,042
Net income	$ 23,216	$ 70,009	$ 54,686	$ 50,278
Earnings per capital and capital equivalent share	$ .20	$ .60	$ .47	$ .43
Market price range—Capital stock[A] High	$ 31.50	$ 37.25	$ 37.75	$ 42.88
Low	$ 25.25	$ 26.25	$ 28.50	$ 31.50

(A) Intel's capital stock and warrants are traded in the over-the-counter market and are quoted on NASDAQ and in the Wall Street Journal and other newspapers. At December 28, 1985 there were approximately 23,599 holders of capital stock and 190 holders of warrants. Warrant prices are given only from the time of issuance (May 1985). Intel has never paid cash dividends and has no present plans to do so.
(B) Net losses for the quarters ended December 28, 1985 and September 28, 1985 include $5.6 million and $9.7 million, respectively, of gains realized on the sale of long-term marketable securities and income from other investments.
(C) Loss per share for the quarters ended December 28 and September 28, 1985 is calculated using the weighted average number of capital shares outstanding for the period. Capital equivalent shares are not included since their effect would be antidilutive considering the net loss for the quarters. Capital equivalent shares are included in the calculation of earnings per share for all other periods presented.

Board of Directors

Gordon E. Moore*
Chairman and Chief Executive Officer, Intel Corporation

Robert N. Noyce*
Vice Chairman, Intel Corporation

Edward L. Gelbach
Senior Vice President, Intel Corporation

Andrew S. Grove*
President and Chief Operating Officer, Intel Corporation

D. James Guzy†
President of NTX Communications Group, manufacturer of data communications equipment

Richard Hodgson†
Industrialist

Sanford Kaplan†•
Retired Corporate Executive

Max Palevsky
Industrialist

Arthur Rock*†•
Chairman of the Executive Committee; Principal of Arthur Rock and Company, venture capital investors

Charles E. Young
Chancellor of the University of California at Los Angeles

** Member of the Executive Committee*
† Member of the Audit Committee
• Member of the Compensation Committee

Officers

Gordon E. Moore
Chairman of the Board of Directors and Chief Executive Officer

Andrew S. Grove
President and Chief Operating Officer

Robert N. Noyce
Vice Chairman of the Board of Directors

Jack C. Carsten
Senior Vice President and General Manager, ASIC Components

Edward L. Gelbach
Senior Vice President and Director, Corporate Sales

Laurence R. Hootnick
Senior Vice President, Corporate Marketing and Sales

Leslie L. Vadasz
Senior Vice President and Director, Corporate Strategic Staff

Craig R. Barrett
Vice President, Components Technology and Manufacturing Group

Richard D. Boucher
Vice President and Director, Administration Group

F. Thomas Dunlap, Jr.
General Counsel and Secretary

Eugene J. Flath
Vice President

Frank C. Gill
Vice President, North American Sales

David L. House
Vice President and General Manager, Microcomputer Group

Harold E. Hughes, Jr.
Treasurer

Willard L. Kauffman
Vice President and Director, Components Quality and Reliability

William W. Lattin
Vice President and General Manager, Systems Group

Gerhard H. Parker
Vice President and Director, Technology Development

Robert W. Reed
Vice President and Chief Financial Officer

George H. Schneer
Vice President and General Manager, Memory Components Division

Keith L. Thomson
Vice President and Assistant General Manager, Systems Group

Ronald J. Whittier
Vice President and Director, Marketing

Form 10-K

If you would like to receive, without charge, a copy of the Corporation's 'Form 10-K' which will be filed with the Securities and Exchange Commission prior to March 28, 1986 for the 1985 year, please send your request to:
F. Thomas Dunlap, Jr., Secretary
Intel Corporation
Mail Stop GR1-21
3065 Bowers Ave.
Santa Clara, CA 95051.

Annual Meeting

The Intel Annual Meeting of Shareholders will be held April 16, 1986 in Phoenix, Arizona.

Transfer Agent and Registrar

The First National Bank of Boston
Box 644
Boston, MA 02102

Certified Public Accountants

Arthur Young & Company
San Jose, California

Corporate Headquarters

3065 Bowers Avenue
Santa Clara, CA 95051

Additional copies of this report are available at the following locations:

Intel Corporation
3065 Bowers Avenue
Santa Clara, CA 95051
(408) 496-8935

Intel Corporation
5200 Elam Young Parkway
Hillsboro, OR 97123
(503) 681-5255

Intel Corporation
2402 W. Beardsley Road
Phoenix, AZ 85027
(602) 869-4092

Intel Corporation
1 Rue Edison-BP 303
78054 St. Quentin En Yvelines Cedex
France
333-064-6000

Intel Japan K.K.
5-6 Tokodai,
Toyosato-cho,
Tsukuba-gun,
Ibaraki-ken, 300-26,
Japan
81-29747-8591

Printed in U.S.A./286/125K/GAC/GK
Order Number: 231722